DOCUMENT RESUME

ED 316 007 EC 230 013

AUTHOR	Kraus, Lewis E.; Stoddard, Susan
TITLE	Chartbook on Disability in the United States.
INSTITUTION	InfoUse, Berkeley, CA.
SPONS AGENCY	National Inst. on Disability and Rehabilitation Research (ED/OSERS), Washington, DC.
PUB DATE	Mar 89
CONTRACT	HN-88011001
NOTE	67p.
PUB TYPE	Statistical Data (110) -- Guides - Non-Classroom Use (055)
EDRS PRICE	MF01/PC03 Plus Postage.
DESCRIPTORS	Charts; Children; *Demography; *Disabilities; Employment Statistics; Graphs; Older Adults; Statistical Analysis; *Statistical Data; Statistical Studies; Statistical Surveys

ABSTRACT

This chartbook is designed as a graphic reference on national statistical information about disabilities. Each page contains a content question, explanatory text, and an explanatory chart or table as well as information on sources used. Key terms are shown in boldface and defined in a glossary. Section 1 provides demographic data on Americans with disabilities. Section 2 reviews more specific data on such characteristics as age, race, income and geographic location. Diseases, injuries, and impairments causing disabilities are discussed in section 3. Section 4 focuses on the elderly and children. Work disability is discussed in section 5. An appendix covers technical issues of each survey used for the charts. Contains 54 references. (PB)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED316007

CHARTBOOK ON DISABILITY IN THE UNITED STATES

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

EC 230013

National Institute on Disability and Rehabilitation Research

BEST COPY AVAILABLE

Chartbook on Disability in the United States

Prepared for:

U.S. Department of Education
Contract # HN 88011001
National Institute on Disability and Rehabilitation Research
Washington, DC

Lauro F. Cavazos, Secretary

March 1989

This **Chartbook on Disability in the United States** has been produced by

Lewis E. Kraus
Susan Stoddard, Ph.D.

InfoUse
1995 University Avenue, Suite 215
Berkeley, CA 94704

Suggested Citation

Kraus, Lewis E. and Stoddard, Susan (1989). Chartbook on Disability in the United States. An InfoUse Report. Washington, DC: U.S. National Institute on Disability and Rehabilitation Research.

Acknowledgements

The **Chartbook** relies on published data from many agencies and organizations, and we are indebted to all the people who have developed, maintained, and analyzed this data. Many of these data experts assisted us directly as we developed the chartbook, providing us with the most currently available information, and reviewing the graphics and text:

John McNeil, Bureau of the Census
Gerry Hendershot, Marie Marano, National Center for Health Statistics
Susan Thompson-Hoffman, Office for Special Education Programs
Larry Mars, Rehabilitation Services Administration
Ron Conley, President's Committee on Mental Retardation
Ben Locke, Karen Bourdon, Ron Manderscheid, National Institute for Mental Health
John Jacobsen, New York State Office for Developmental Disabilities

The following agencies and researchers were kind enough to send along their most recently released data:

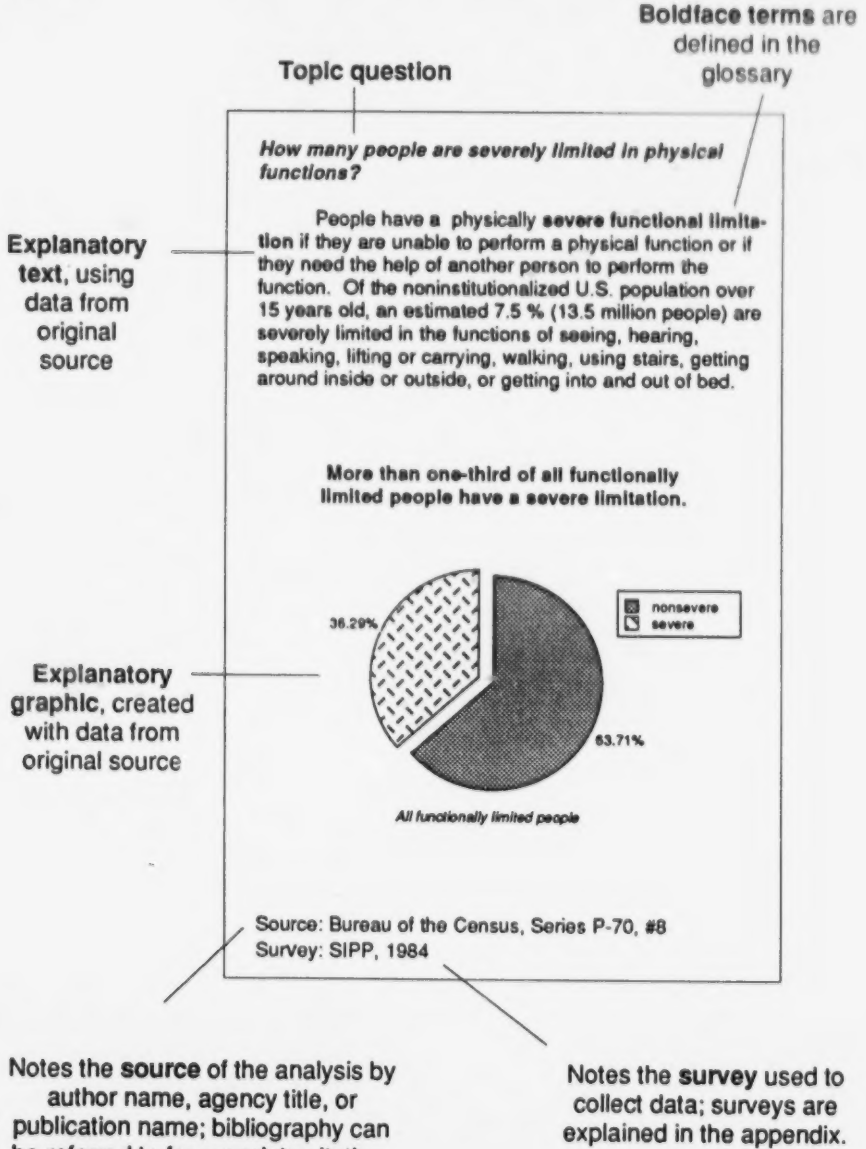
Administration on Developmental Disabilities
President's Committee on Employment of Persons With Disabilities
Association for Retarded Citizens
National Institute for Children and Youth with Handicaps
Social Security Administration
Health Care Financing Administration
Bureau of Labor Statistics
Scott Campbell Brown, Gallaudet College
Irving Zola, Brandeis University
David Pfeiffer, Suffolk College

Mitchell P. LaPlante, Director of the Disability Statistics Program, University of California, San Francisco, served as a consultant to the project, and provided helpful comment at key stages of production. Lois Verbrugge, Charlie Lakin, and Dorothy Rice provided guidance in specific areas of this chartbook. In addition, several people provided important commentary in an intensive review of drafts including Frank Bowe, Rod Pelton, and Becky J. Hayward. Mark Wozny and Lydia Gans assisted in preliminary research and in presenting table materials.

Finally we would like to give special recognition to Inez Fitzgerald Storck who served as project officer. This project is part of National Institute for Disability and Rehabilitation Research's continuing effort to make information on disability statistics available to a wider audience.

Preface

This chartbook is intended as an easy-to-use reference on national statistical information on disability. Each page contains a **topic question, explanatory text** on the topic, and an **explanatory graphic (or table)** that provides data in an easy-to-read form. The **source** of the information and the **survey** used to collect the data appear at the bottom of the page. In the text, key terms are shown in boldface, and are defined in the glossary at the end of the book.


Boldface terms are defined in the glossary
Topic question
How many people are severely limited in physical functions?
People have a physically severe functional limitation if they are unable to perform a physical function or if they need the help of another person to perform the function. Of the noninstitutionalized U.S. population over 15 years old, an estimated 7.5 % (13.5 million people) are severely limited in the functions of seeing, hearing, speaking, lifting or carrying, walking, using stairs, getting around inside or outside, or getting into and out of bed.
Explanatory text, using data from original source
More than one-third of all functionally limited people have a severe limitation.
nonsevere
severe
36.29%
63.71%
All functionally limited people
Explanatory graphic, created with data from original source
Source: Bureau of the Census, Series P-70, #8
Survey: SIPP, 1984
Notes the source of the analysis by author name, agency title, or publication name; bibliography can be referred to for complete citation.
Notes the survey used to collect data; surveys are explained in the appendix.

Contents

Acknowledgements i

Preface iii

Contents iv

Introduction vii

Section 1 - Prevalence of Disabilities 1
How many people are limited in activity? 2
How many people are limited in physical functions? 3
How many people are severely limited in physical functions? 4
How many people need assistance in daily activities? 5
How many people are mentally retarded? 6
How many people have a mental disorder? 7

Section 2 - Characteristics of People with Disabilities 9
How do activity limitations change with age? 10
How do the levels of physical functional limitations change with age? 11
How do the numbers of activity limitations differ for males and females? 12
How do physical functional limitations differ for males and females? 13
How do activity limitations differ for races and ethnicities? 14
How does need for assistance with activities of daily living differ by race or ethnicity? 15
How do activity limitations differ by family income? 16
How do functional limitations differ by income? 17
How do activity limitations differ by educational level? 18
How does the need for assistance differ with educational level? 19
Where do people with disabilities live? 20
How many people with disabilities live in institutions? 21

Section 3 - Causes of Disabilities 23
Which chronic health conditions cause activity limitations most often? 24
What are the most prevalent chronic health conditions? 25
What role does injury play in disability? 26

Section 4 - Disability, the Elderly, and Children 27
How many elderly persons have limitations? 28
How many older people need assistance with activities of daily living? 29
How many children have limitations in activity? 30
Are there differences in sex, race/ethnicity or income for children with limitations? 31
How many children and youth receive special education? 32
Where do children and youth receive special education? 33

Section 5 - Work and Disabilities 35
How many people are considered to be work disabled? 36
How many work disabled persons are in the labor force, or are unemployed? 37
How many work disabled persons are working full-time? 38
How do the states differ in people with work disabilities? 39
How many persons have a severe work disability? 40
How many people are limited or unable to work because of a health condition? 41
What chronic health conditions are the most frequent causes of work limitation? 42
How do occupational injuries and illnesses affect work disability? 43
What types of occupations are held by people with work disabilities? 44
What are the earnings of someone with a work disability? 45
Do disabled workers live alone or with their families? 46
How many people in institutions have a work disability? 47
How many people with disabilities does the Vocational Rehabilitation system help? 48

Glossary 49

Bibliography 54

Appendix 59

Introduction

The need for available statistics on disability is growing. Researchers, legislators, manufacturers, and the general public are becoming increasingly aware of disability in the United States. The **Chartbook on Disability in the United States** is intended as a reference publication on basic disability statistics. The presentation is non-technical and meant for people who are interested in data on persons with disabilities in the United States, but who are not familiar with the statistical sources.

The book's approach uses the most generalizable data possible from national survey and program data. These data are considered by experts in the field to provide the best estimates of disability nationally. The survey data, however, are not without controversy, mostly based on technical issues or definitions of terms. For more detailed information, there is an appendix covering technical issues of each survey. Additionally, each term which is uniquely defined by the surveys is bold-faced on the page and is covered in the glossary. All data is presented in the **Chartbook** as it appears in the original analyses to retain the author's intent.

The definition of *disability* is a crucial issue. "Disability" has been used to mean everything from a person with a limitation in a sporting or recreational activity to someone who must rely on others to help with life's most basic physical functions. In the **Chartbook**, we use the definition from the World Health Organization which says that "a disability is any restriction or lack (resulting from an impairment) of ability to perform an activity in the manner or within the range considered normal for a human being" (World Health Organization, Geneva, 1980).

The **Chartbook** presents data available from national sources on disability. Section 1 provides estimates of how many people with disabilities there are in the United States. Section 2 reviews the data on characteristics (age, sex, race, ethnicity, income, education, geographic location) of people with disabilities as reported by national surveys. Diseases, injuries, and impairments causing disabilities are covered in Section 3. Section 4 examines aspects of two particularly important disability populations, the elderly and children. Finally, work disability is reviewed in Section 5.

Section 1: Prevalence of Disabilities

This first section provides numbers to answer the most basic question on disability: "How many people have disabilities?" There are varying definitions of "disability". This chartbook will use the best estimates from several national surveys.

The first estimates are from the National Health Interview Survey (NHIS) which provides data on the number of people with activity limitations. The self-reported data from this survey provide estimates of how many people feel that they are disabled, where "disabled" is defined as being limited in activity.

The second estimates of disability are from the Survey of Income and Program Participation (SIPP), where respondents provide information on limitations in physical functioning.

Levels of severity are given for both measures also. In addition, another measure used in the NHIS, the need for assistance in daily activities, can be considered a measure of severity. Data on this measure are also provided.

These surveys are better at measuring physical limitations than mental limitations. Other data sources are used for estimating the prevalence of mental retardation and mental disorders.

Topic Questions:

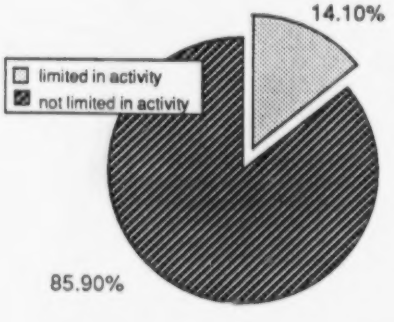
How many people are limited in activity?
How many people are limited in physical functions?
How many people are severely limited in physical functions?
How many people need assistance in daily activities?
How many people are mentally retarded?
How many people have a mental disorder?

How many people are limited in activity?

An estimated 14.1% of the 231.5 million noninstitutionalized United States residents have an **activity limitation**. Of these, 8.8 million people are unable to perform their **major activity**, 13.6 million people are limited in the kind or amount of major activity they can perform, and 10.1 million are limited in activities other than their major activity. Major activities that these 32.5 million people have reduced ability to perform are (by age group):

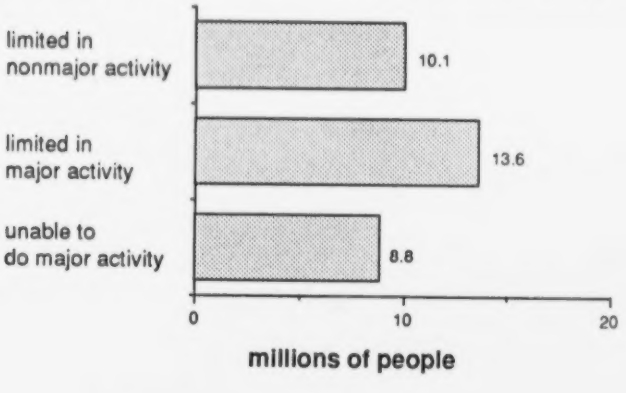
people age 70 and over: ability to care for oneself (bathing, eating, dressing, or getting around the home) and one's home (doing household chores, doing necessary business, shopping, or getting around for other purposes) without another person's assistance;
persons 18-69: working or keeping house;
persons 5-17: attending school;
children under age 5: playing.

One in seven people is limited in activity.



U.S. noninstitutionalized population

People are limited in activity to different degrees.

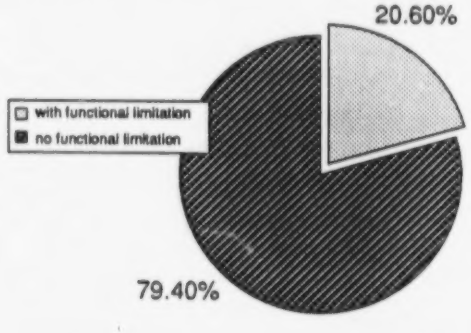


Source: LaPlante
Survey: NHIS, 1983-1985

How many people are limited in physical functions?

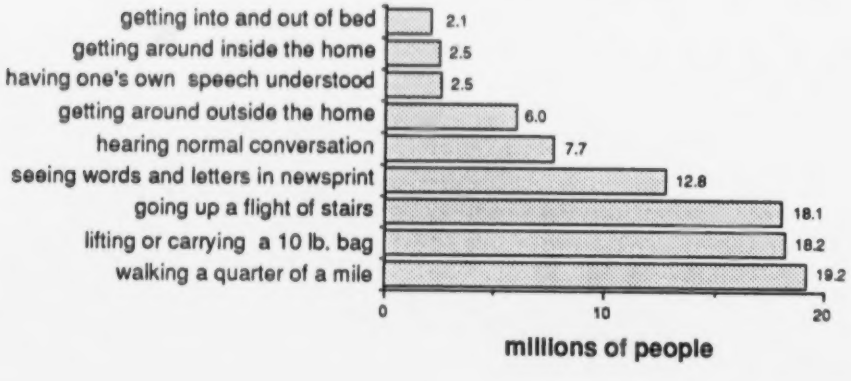
When disability is categorized as a limitation in a person's ability to perform selected physical functions, more than 20% of all noninstitutionalized persons age 15 and over in the United States have a physical **functional limitation** (37.3 million people). Many people have more than one limitation. For 19.2 million people the limitation is in walking a quarter of a mile; for 18.2 million it is lifting or carrying something as heavy as a bag of groceries; for 18.1 million, it is going up a flight of stairs without resting; for 12.8 million, it is seeing words and letters in ordinary newsprint, even when wearing glasses or contact lenses; for 7.7 million, it is hearing what is said in normal conversation; for 6.0 million, it is getting around outside the home; for 2.5 million, it is having one's own speech understood; for 2.5 million, it is getting around inside the home; and for 2.1 million, it is getting into and out of bed.

One in five people over age 15 has a physical functional limitation.



U.S. noninstitutionalized population over age 15

But the types of functional limitations vary.

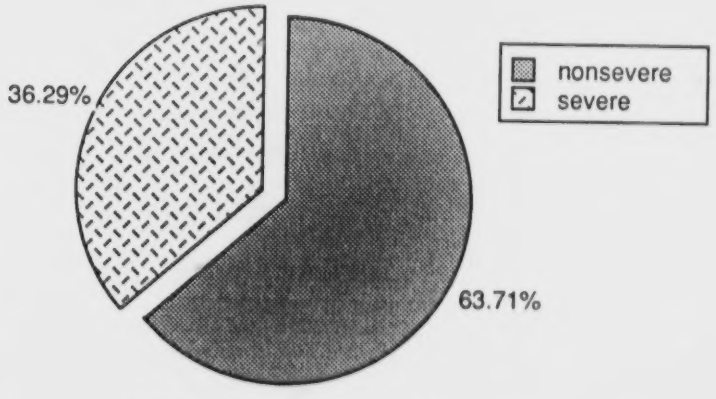


Source: Bureau of the Census, Series P-70, #8
Survey: SIPP, 1984

How many people are severely limited in physical functions?

People have a physically **severe functional limitation** if they are unable to perform a physical function or if they need the help of another person to perform the function. Of the noninstitutionalized U.S. population over 15 years old, an estimated 7.5% (13.5 million people) are severely limited in the functions of seeing, hearing, speaking, lifting or carrying, walking, using stairs, getting around inside or outside, or getting into and out of bed.

More than one-third of all functionally limited people have a severe limitation.



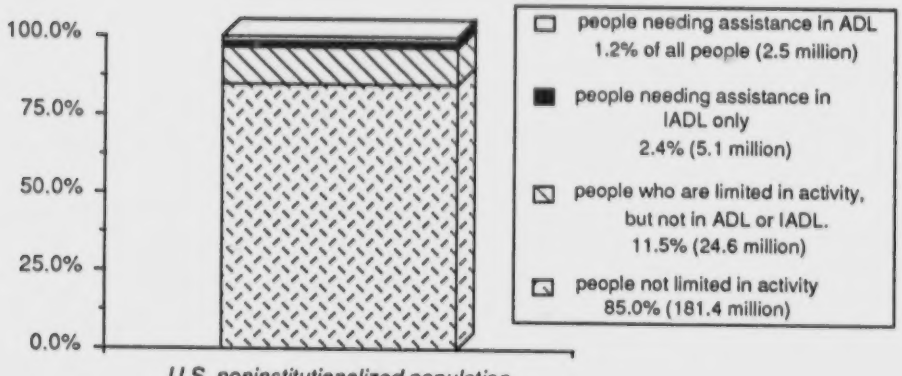
All functionally limited people

Source: Bureau of the Census, Series P-70, #8
Survey: SIPP, 1984

How many people need assistance in daily activities?

More than 4 percent (7.7 million) of the age 15 and over noninstitutionalized population in the United States need personal assistance with one or more activities. Personal care limitations for elderly and disabled populations can be assessed using two scales: "activities of daily living" (**ADL**) and "instrumental activities of daily living" (**IADL**). ADL includes bathing, dressing, eating, walking, and other personal functioning activities. IADL covers preparing meals, shopping, using the phone, doing laundry, and other measures of living independently. If someone has a need for assistance in ADL, it is assumed that they will have a need for assistance in IADL also, but they are not counted in both categories. Over 5 million people need assistance in IADL only, while 2.5 million need assistance in ADL.

One in 40 people needs assistance in IADL, and one in 80 needs assistance in ADL.



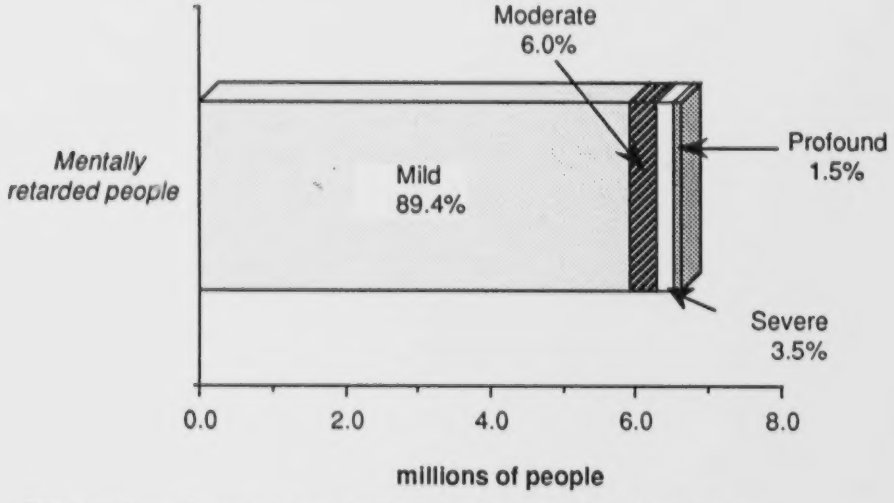
Source: LaPlante
Survey: NHIS, 1983-1985

How many people are mentally retarded?

Because mental retardation is difficult to measure in the population, there is not much agreement on how many people are **mentally retarded**. Estimates of their percentage in the U.S. population range from .67% to 3%. At any point in time, however, approximately 1% of the population is estimated to be mentally retarded. This translates to between 2 and 2.5 million people who are mentally retarded. Estimates vary by age and definition used.

There are four different degrees of mental retardation, which are categorized by IQ and social functioning. People with IQ's under 20 are considered to be profoundly mentally retarded (1.5% of all mentally retarded). Severely mentally retarded people have IQ's between 21 and 35 (3.5%). Moderately mentally retarded individuals have IQ's between 36 and 50 (6.0%).The large majority are mildly mentally retarded people with IQ's between 51 and 70 (89.4%). An additional 2.5 million are borderline (70-80) or low normal (80-90) in IQ.

Nine out of 10 mentally retarded persons are mildly retarded.



Technical Note: These data are based upon a 3% estimate of the population.

Sources: Jacobsen and Janicki, 1983;
Association for Retarded Citizens, Arcfacts, 1987

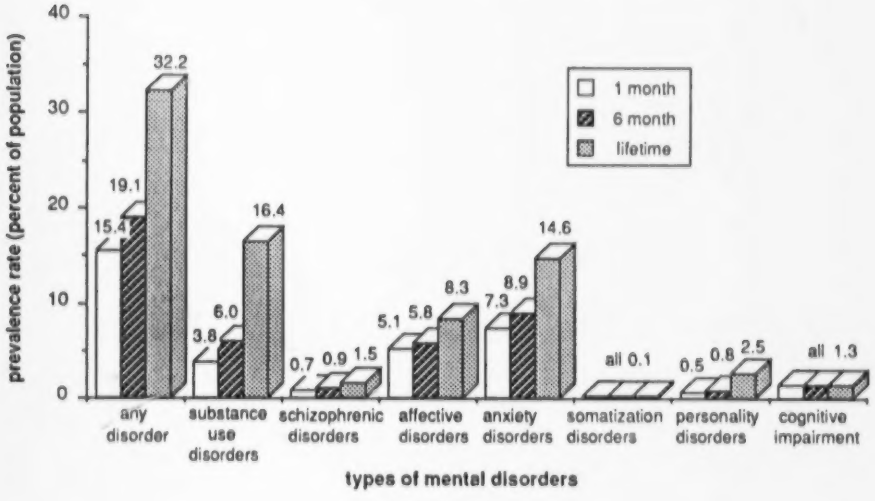
How many people have a mental disorder?

There is great difficulty in measuring this population based upon issues of definition, and of the amount of time that someone could have a **mental disorder**. A five site survey of noninstitutionalized adults (age 18 and over) in the United States estimated that 15.4% of this population report a mental disorder in any one month period. Furthermore, 19.1% report a mental disorder in the preceding six month period, and 32.2% report one at some time during their life.

National rates of major mental disorders are listed below. It should be noted that some disorders predominately affect men, such as substance use and antisocial personality, whereas affective, anxiety and somatization disorders affect women more.

Technical Note: The five sites of this survey (the Epidemiologic Catchment Area Survey) are New Haven, Connecticut; Durham, North Carolina; Baltimore, Maryland; St.Louis, Missouri; and Los Angeles, California.

Almost one-third of people have a mental disorder in their lifetimes.



Source: Regier, et al., 1988
Survey: Epidemiologic Catchment Area Survey, 1988

Section 2: Characteristics of People With Disabilities

This section provides data collected in national surveys on the demographics of people with disabilities. Subjects covered in this section include age, sex, ethnicity, income, educational level, geographic location, and residence of people with disabilities (including those in institutions). As with Section 1, the information is based predominantly on the NHIS and the SIPP, which have the broadest definitions of disabilities (limitation of activity and limitation of function). There are also pages on the demographics of severely disabled persons, as measured in these surveys (including those who need assistance in activities of daily living).

Topic Questions:

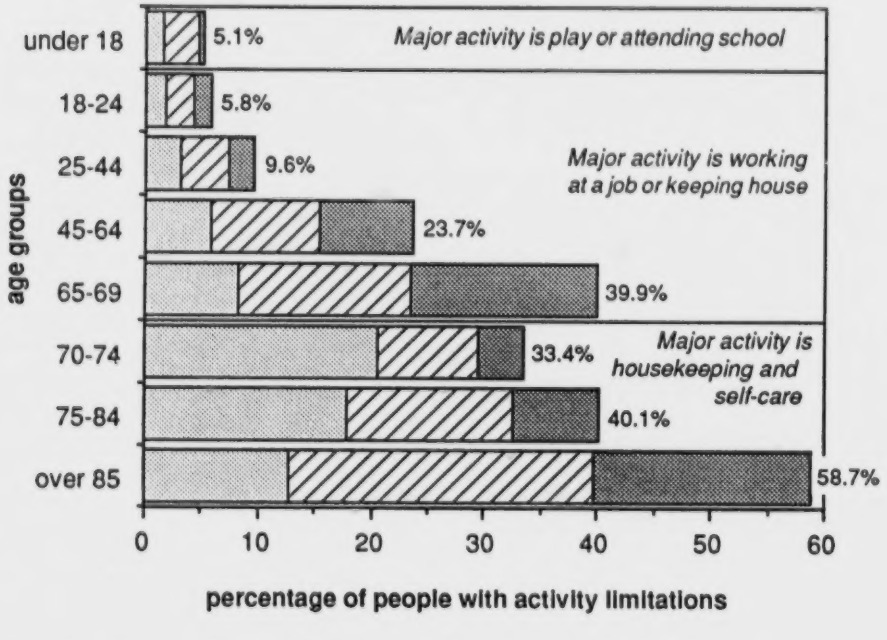
How do activity limitations change with age?
How do the levels of physical functional limitations change with age?
How do the numbers of activity limitations differ for males and females?
How do physical functional limitations differ for males and females?
How do activity limitations differ for races and ethnicities?
How does the need for assistance with activities of daily living differ by race or ethnicity?
How do activity limitations differ by family income?
How do functional limitations differ by income?
How do activity limitations differ by educational level?
How does the need for assistance differ with educational level?
Where do people with disabilities live?
How many people with disabilities live in institutions?

How do activity limitations change with age?

Activity limitation increases with age. For the 62.6 million noninstitutionalized persons in the U.S. under age 18, where the **major activity** is playing or attending school, 5.1% have activity limitations: 0.4% are unable to play or attend school, 3.2% are limited in the amount or kind of play or school they can participate in, and 1.5% are limited in a nonmajor activity. In contrast, for the 17.3 million people over age 70, where the major activity is housekeeping and self-care, a total of 39.4% are limited: 7.4% are unable to keep house or do self-care, 13.6% are limited in the amount or kind of housekeeping or self-care they can do, and 18.4% are limited in a non-major activity.

Technical Note: The definition of major activity changes after age 69, to self-care and housekeeping from work, and percentage rates for age groups above 69 years drop initially, but then increase.

Activity limitations of all degrees increase with age.

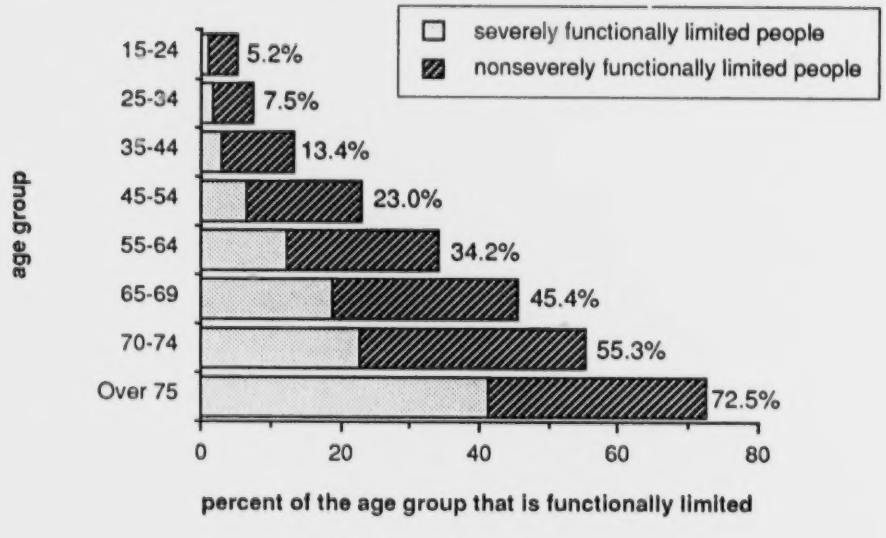


Source: LaPlante
Survey: NHIS, 1983-1985

How do the levels of physical functional limitations change with age?

The numbers and proportions of people with physical **functional limitations** increase with age, as do the proportions of those with **severe functional limitations**. There are 2.1 million (5.2%) 15 to 24 year olds with a functional limitation; 0.9% of these are classified as severely limited. On the other end of the scale, 7.3 million (72.5%) of those 75 and older have functional limitations, with 41.2% of these considered severe.

Functional limitations increase with age.



Source: Bureau of the Census, Series P-70, #8
Survey: SIPP, 1984

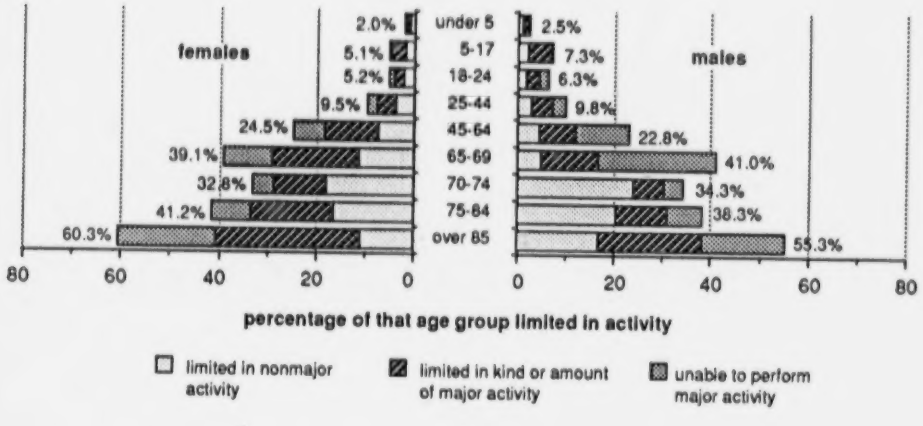
How do the numbers of activity limitations differ for males and females?

In general, women are more likely to have **activity limitations** than men. Of the 119.8 million noninstitutionalized females in the U.S., 14.5% are limited in activity compared to 13.6% of the 111.8 million males. Women are less likely to be unable to perform their **major activity** than men (3.1% to 4.6%) but are more likely to be limited in the amount or kind of major activity they can perform (6.5% to 5.2%) or to be limited in activities other than their major activity (4.9% to 3.8%).

It is important to note that some differences in activity limitations between males and females can be influenced by age. Under the age of 45, men are more likely than women to report being limited in amount or kind of their major activity; however, at ages 45 and older (where there are more women than men), women are more likely to report a limitation.

Technical Note: Since keeping house and working are the major activities for ages 18-69, people who have no limitation in keeping house but do report being limited in working at a job or business were classified as being limited in activities other than their major activity.

Women report being limited in activity more than men at older ages.

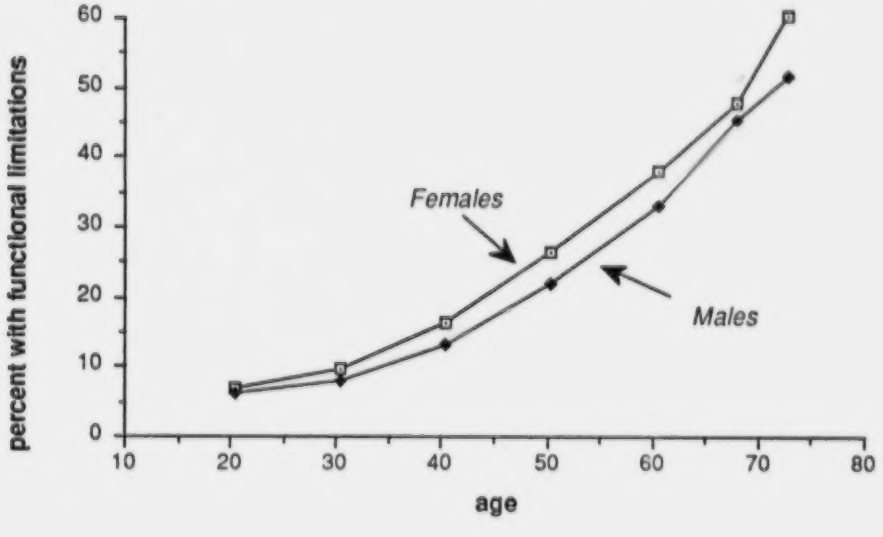


Source: LaPlante
Survey: NHIS, 1983-1985

How do physical functional limitations differ for males and females?

Of the noninstitutionalized population in the United States over the age of 15, 22 million females (23.3% of females over 15) report physical **functional limitations** compared to 15.3 million males (17.7%). Furthermore, 8.9 million females report **severe functional limitations** (9.4%), while only 4.7 million males report functional limitations which are severe (5.4%). For all age groups, females report higher percentages of physical functional limitations, rising from 5.6% at the 15-24 age group to 62.0% at the 65 and over age group. Males are lower, rising from 4.8% to 53.5%.

Females are more likely to report physical functional limitations than males.



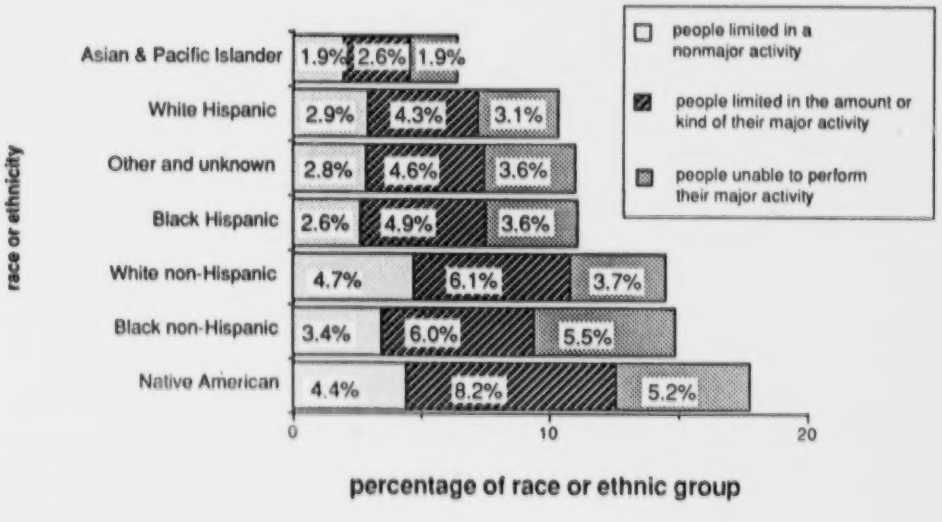
Technical Note: The midpoints of the groups have been used to create a continuous line.

Source: Bureau of the Census, Series P-70, #8
Survey: SIPP, 1984

How do activity limitations differ for races and ethnicities?

The rate of **activity limitations** reported by individuals in different ethnic groups varies from a low of 6.5% for Asian and Pacific Islanders to a high of 17.8% for Native Americans. Asian and Pacific Islanders have the lowest percentages of activity limitation in major and nonmajor activities. Black non-Hispanics have the highest proportion unable to perform their **major activity** (5.5%), Native Americans have the highest proportion limited in amount or kind of major activity (8.2%), and white non-Hispanics have the highest proportion of people limited in nonmajor activity (4.7%). Approximately 26 million white non-Hispanics are limited, with 6.6 million severe enough to be unable to perform their major activity. An estimated 4 million black non-Hispanics are limited, with 1.5 million severe enough to be unable to perform their major activity.

Activity limitation rates for races/ethnicities range from about 1 in 15 for Asians/Pacific Islanders to nearly 1 in 5 for Native Americans.



Source: LaPlante
Survey: NHIS, 1983-1985

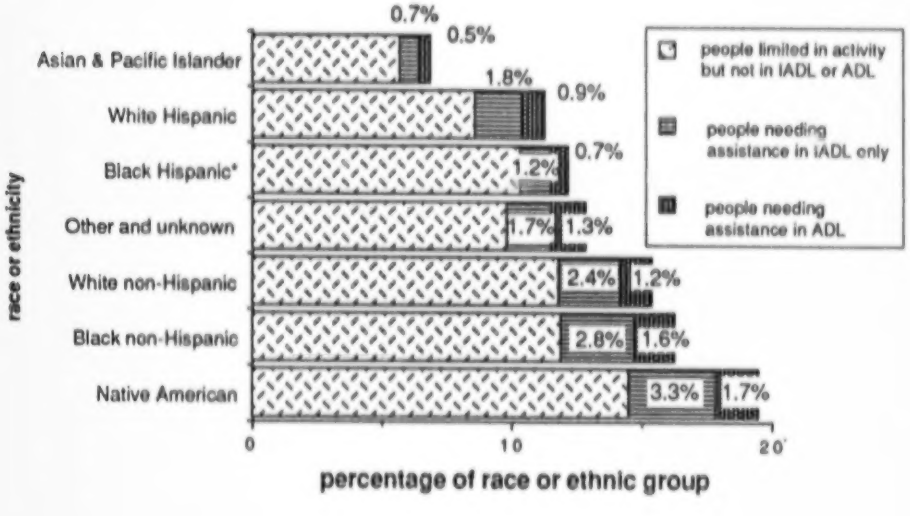
How does need for assistance with activities of daily living differ by race or ethnicity?

Among ethnic groups, Native Americans report the highest proportion of their population needing assistance in activities of daily living (**ADL**) and instrumental activities of daily living (**IADL**) only, 1.7% and 3.3%, respectively. Lowest in both categories are Asian and Pacific Islanders, with proportions of 0.7% reporting need for assistance in ADL and 0.5% reporting need for assistance in IADL only.

Over 4 million white non-Hispanic people are estimated to need assistance in IADL only and another 1.9 million in ADL. Of black non-Hispanics, 671,000 need assistance in IADL only and another 383,000 in ADL.

Technical Note: Persons of Hispanic origin may be of any race.

No more than 5.0% of any race or ethnicity need assistance in daily activities.



*Technical Note: Values for "IADL only" and "ADL" have low statistical reliability or precision

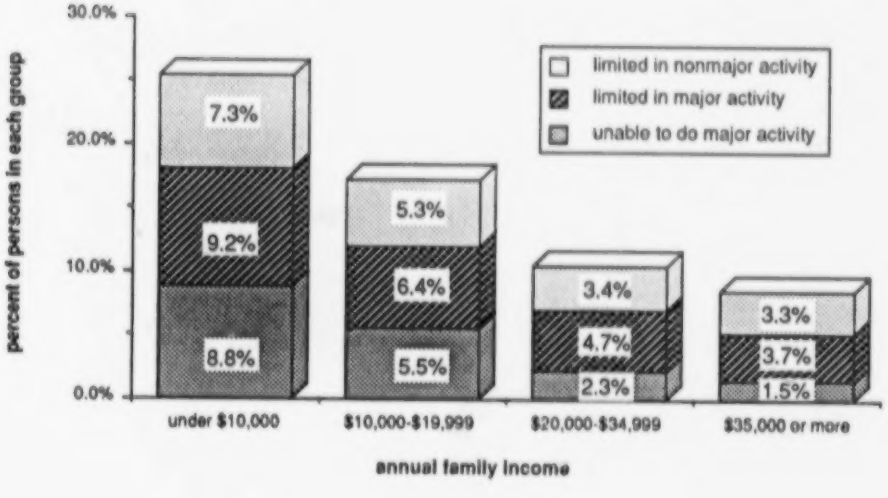
Source: LaPlante
Survey: NHIS, 1983-1985

How do activity limitations differ by family income?

There is a clear link between **activity limitation** and **family income**. Income loss often occurs as a result of disability. An estimated 25.3% of people who are members of low-income families (less than $10,000 income annually) have activity limitations (8.5 million people). An estimated 2.4 million of these low-income family members are limited in nonmajor activity (7.3% of low-income family members), another 3.1 million are limited in amount or kind of **major activity** (9.2%), and 3.0 million are severely limited by being unable to carry out their major activity (8.8%). On the contrary, only 8.8% (5.5 million people) of members of families with an annual income of $35,000 or more have activity limitations; 3.3% (2.1 million) are limited in a nonmajor activity, 3.7% (2.4 million) are limited in amount or kind of major activity, and only 1.5% (974,000) are unable to carry out their major activity.

Technical Note: Incomes are in 1986 dollars.

Over 1/4 of people in families receiving less than $10,000 per year have activity limitations.



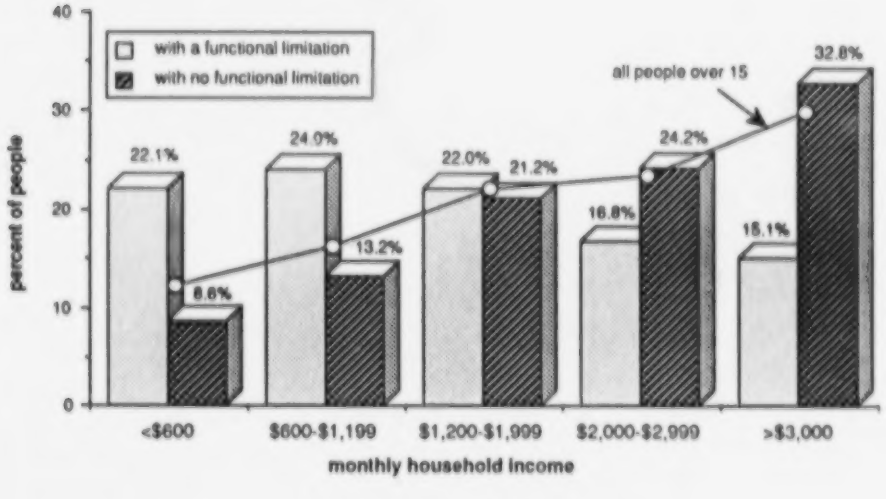
Source: NCHS, **Vital and Health Statistics, #164**
Survey: NHIS 1986

How do functional limitations differ by income?

People over age 15 with **functional limitations** tend to be members of lower income households. Over two-thirds (68.1%) of people over age 15 with functional limitations have **monthly household incomes** of less than $2,000 (translating to over 25 million people), while only 43.0% of people with no functional limitations receive less than $2,000 per month (62 million people). Furthermore, whereas 8.6% of people with no functional limitations have incomes less than $600 a month, 22.1% of those with functional limitations receive that little. On the other hand, 32.8% of people with no functional limitations have monthly household incomes of more than $3,000, but only 15.1% of people with limitations receive $3,000 or more monthly. Note, however, that older people, who have higher rates of limitations, have lower incomes, explaining some of the relationship of income and limitations.

Technical Note: Income figures are in 1984 dollars.

A larger part of those with functional limitations has lower incomes than people with no limitation.

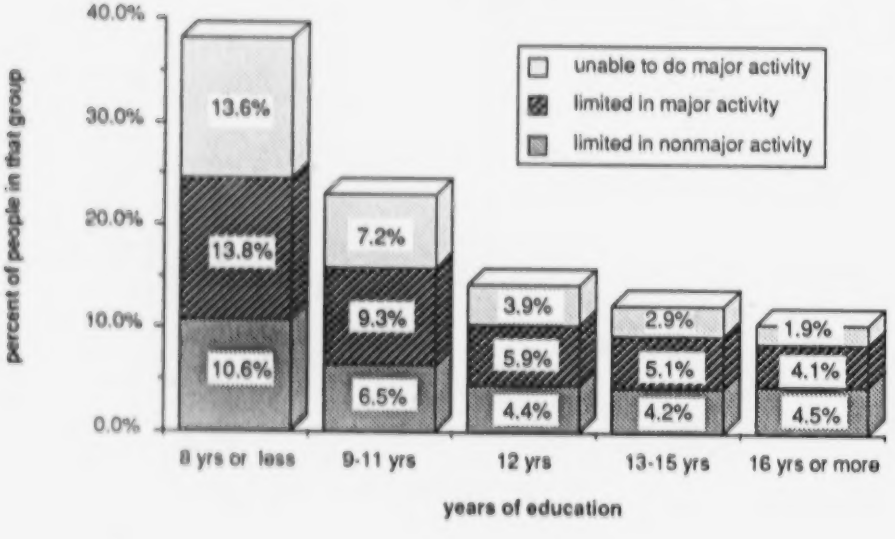


Source: Bureau of the Census, Series P-70, # 8
Survey: SIPP, 1984

How do activity limitations differ by educational level?

People age 18 and over who have completed 8 years or fewer of school are more likely to have **activity limitations** than are people with more education. In fact, the higher the educational level, the less likely one is to be limited in activity; 62.0% of the 20.2 million people with 8 years or less education are not limited in activity, compared to 89.5% of the 27.8 million people with 16 years or more education. The pattern of increasing limitations for people with decreasing levels of education holds for persons limited in nonmajor activity (4.5% to 10.6%), those limited in kind or amount of **major activity** (4.1% to 13.8%), and those unable to perform major activity (1.9% to 13.6%). It should be noted, however, that higher levels of education may place someone in a job that is more sedentary and less likely to pose an on-the-job hazard, as opposed to a blue collar job which may pose more risks. It should also be noted that older people, who have higher rates of limitations, also have lower amounts of education, and were more likely to have physically dangerous occupations than today's adult.

Almost 40% of people with 8 years or less of education have activity limitations.

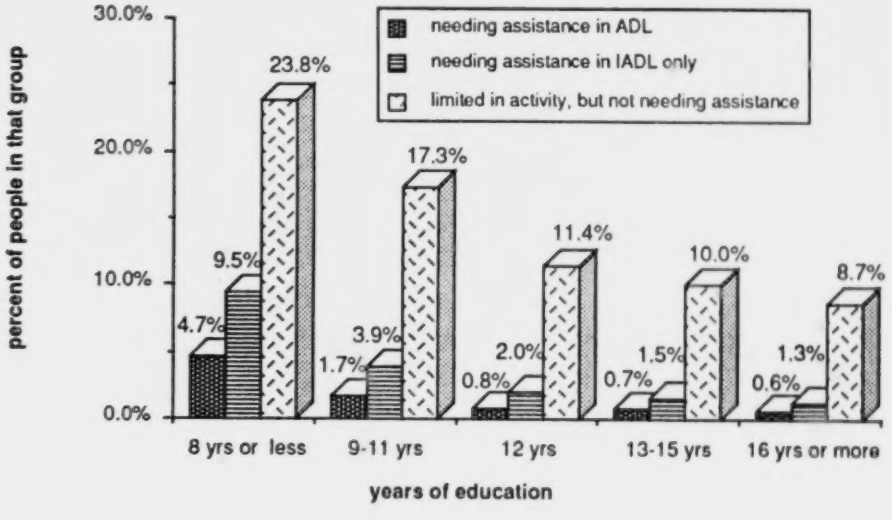


Source: LaPlante
Survey: NHIS 1983-1985

How does the need for assistance differ with education level?

The percent of those needing assistance in **IADL** only (instrumental activities of daily living) drops off quickly as level of education rises; 9.5% or 1.9 million for those with 8 years or less of education compared to 1.3% or 349,000 for those with 16 or more years of education. The same trend occurs for those needing assistance in **ADL** (activities of daily living), dropping from 4.7% or 937,000 to 0.6% or 164,000, respectively. It should be recognized that there is a lower probability of advanced education in older citizens at this time. Therefore, some of the difference can be attributed to the influence of age.

One in seven people having 8 or fewer years of education needs assistance with activities of daily activities.



Source: LaPlante
Survey: NHIS, 1983-1985

Where do people with disabilities live?

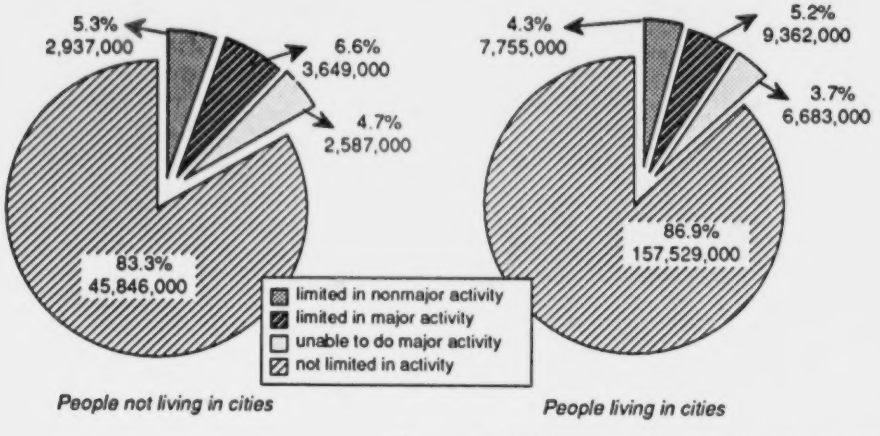
People with **activity limitations** live in all parts of the United States, but a slightly higher occurrence of activity limitations in the population is found in the South (15.1%) and the Midwest (14.4%) than in the Northeast (12.7%) or the West (12.7%).

Additionally, cities with populations above 50,000 (metropolitan statistical areas- **MSAs**) have lower rates of people with activity limitations: 13.1% of the 181 million people living in MSAs as compared to 16.7% of the 55 million living elsewhere. People from cities are consistently lower across all degrees of activity limitations; 3.7% are unable to carry on their **major activity** compared to 4.7% of people who live elsewhere; 5.2% of people in MSAs are limited in amount or kind of major activity they can perform compared to 6.6% of people elsewhere; and 4.3% of city people are limited but not in major activity compared to 5.3% of people living elsewhere.

Technical Note: Geographic locations include the following states:

Midwest-	Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin.
Northeast-	Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont.
South-	Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia.
West-	Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming.

People living outside cities report more activity limitations.

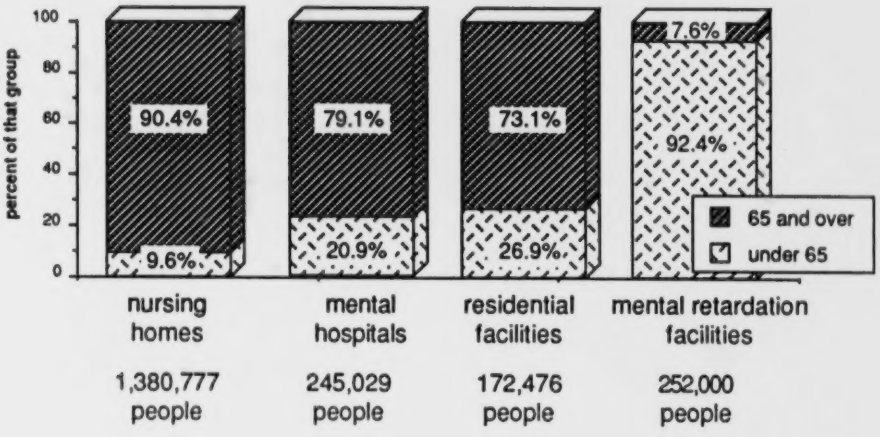


Source: NCHS, **Vital and Health Statistics, #164**
Survey: NHIS, 1986

How many people with disabilities live in institutions?

Around 2 million people reside in institutions intended for people with different types and levels of limitations. These institutions include **nursing homes, mental hospitals, residential facilities,** and **mental retardation facilities**. Over 1.3 million people are in nursing homes and almost 250,000 reside in mental (psychiatric) hospitals, while 252,000 reside in mental retardation facilities and an additional 172,476 are in residential facilities (which serve both elderly and people who are mentally retarded). While nursing homes, mental hospitals, and residential facilities house a predominantly older population (90.4% of nursing home, 79.1% of mental hospital, and 73.1% of residential home residents are over 65), facilities for mentally retarded persons have an overwhelming number of young adult and middle age people (76.0% are between 22 and 64 years of age).

Of the more than 2 million people served in institutions many are over the age of 65.



Sources: NCHS, **Advance data**, #147; NCHS, **Advance data**, #143; Lakin et al.; Census of Persons in Institutions and Group Quarters
Surveys: ILTCP, 1986; Census, 1980

Section 3: Causes of Disabilities

Two of the most common reasons people have a disability are a chronic health condition and an injury. This section presents the data on the most prevalent chronic health conditions, how much activity limitation is caused by those conditions, which conditions include the highest percentage of persons with limitations, and how many days of activity restriction those conditions cause. In addition, there are data on the role of injury in activity limitations, impairments, and chronic conditions.

Topic Questions:

Which chronic health conditions cause activity limitations most often?
What are the most prevalent chronic health conditions?
What role does injury play in disability?

Which chronic health conditions cause activity limitations most often?

Chronic health conditions can cause **activity limitations**. The conditions causing people to have activity limitations of any kind (in nonmajor or **major activity**) most often are: multiple sclerosis (77.0% of people with the condition are limited); paralysis of extremities (65.7%); emphysema (48.2%); intervertebral disk disorders (45.9%); and epilepsy (42.8%). Chronic conditions causing the most number of days of **activity restriction** (bed days, work-loss days, school-loss days, cut down days) are similar: paralysis of extremities (56.2); cerebrovascular disease (44.7), emphysema (42.5), phlebitis (34.7); and osteomyelitis (34.4).

Technical Note: Days of activity restriction are not reported for all conditions.

Multiple Sclerosis and paralysis are the most limiting of chronic conditions.

Chronic condition	Percent with condition who are limited	Number of days of activity restriction
Multiple Sclerosis	77.0	†
Paralysis of extremities	65.7	56.2
Emphysema	48.2	42.5
Intervertebral disk disorders	45.9	34.3
Epilepsy	42.8	†
Pneumoconiosis	41.9	†
Cerebrovascular disease	41.2	44.7
Osteomyelitis and other diseases of bone	34.3	34.4
Diabetes	32.1	21.0
Deformities or orthopedic impairments	31.6	25.5
Heart conditions	31.4	26.6
Phlebitis and thrombophlebitis	27.3	34.7
Cystic fibrosis	27.3*	†
Congenital anomalies of the circulatory system	27.1	†
Poor circulation	24.0	31.5
Liver conditions	21.8	†
Asthma	21.3	16.3
Arthritis	20.8	19.8
Absence of extremities	18.2	11.3
Visual impairments	16.7	8.2

*- Value has low statistical reliability or precision (relative standard error exceeds 30%).

†- Data not reported.

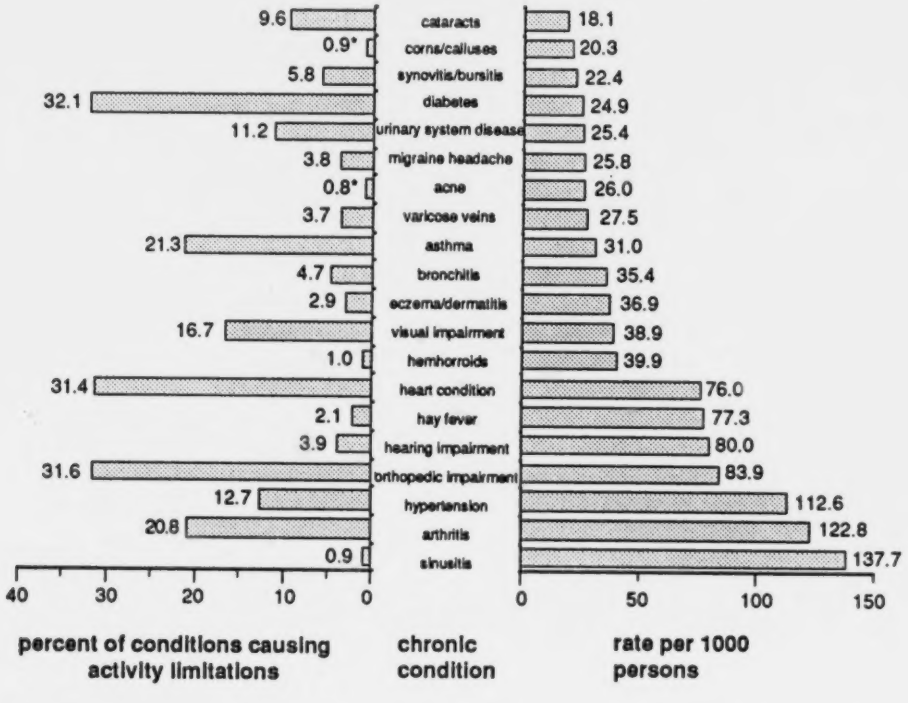
Source: NCHS, **Vital and Health Statistics**, #155
Survey: NHIS, 1979-1981

What are the most prevalent chronic health conditions?

The most prevalent **chronic health conditions** are not necessarily those that cause the most disability. Rates of chronic conditions (per 1,000 people) are: 1) chronic sinusitis (137.7); 2) arthritis (122.8); 3) hypertension (112.6); 4) deformity or orthopedic impairment (83.9); and 5) hearing impairment (80.0). The most prevalent chronic conditions, their rate of occurrence, and the percentage of **activity limitation** they cause are listed below.

Technical Note: Groupings of the conditions can affect the percents and rates (i.e., blindness would have a higher percent of activity limitations than does visual impairments).

Chronic conditions with the highest prevalence are not necessarily those that can cause the most activity limitations.



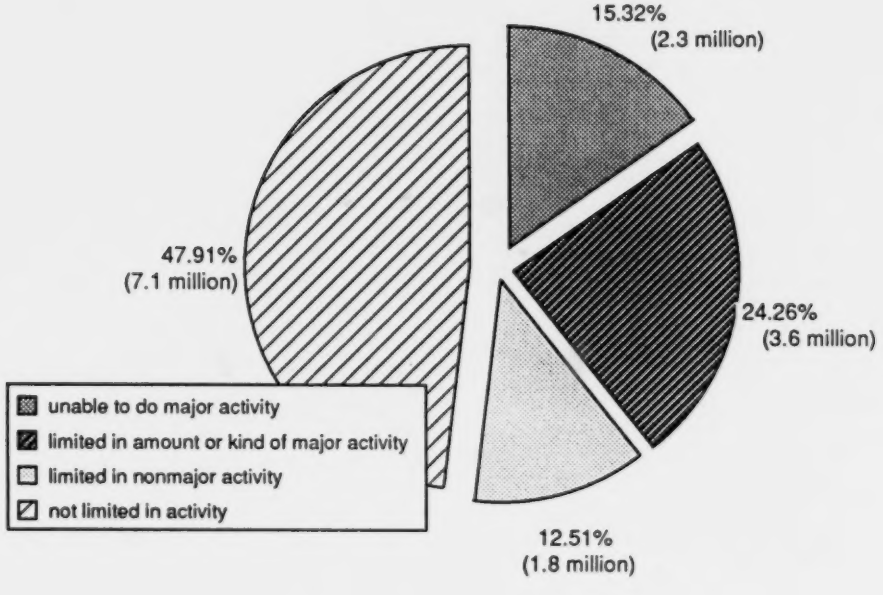
*Technical Note: Values have low statistical reliability or precision (relative standard error exceeds 30%).

Source: NCHS, Vital and Health Statistics, #155
Survey: NHIS, 1979-1981

What role does injury play in disability?

Chronic health conditions and **impairments** resulting in **activity limitations** can be caused by **injuries**. Of 14.8 million impairments caused by injuries, 52.1% caused activity limitations; 24.3% of the impairments create a limitation in the kind or amount of major activity of the person, 15.3% cause an inability to carry on a major activity, and 12.5% cause a limitation in a nonmajor activity. Seventy percent of impairments due to injuries are deformities or orthopedic impairments.

More than half of the impairments caused by injuries result in activity limitations.



Source: NCHS, **Vital and Health Statistics, #159**
Survey: NHIS, 1980-1981

Section 4: Disability, the Elderly, and Children & Youth

Although people with disabilities exist throughout the population, two groups are especially important to look at: elderly persons and children & youth. Surveys have been designed specifically for collecting data about these two subpopulations. This section reports the specifics of disability as related to elderly persons, and as related to children & youth, especially how the groups differ from the rest of the population, and male - female comparisons. Again, disability is represented by limitations in activity, limitations in physical functions, and needing assistance in daily activities. In addition, there are data on numbers of special education students and types of special education environments.

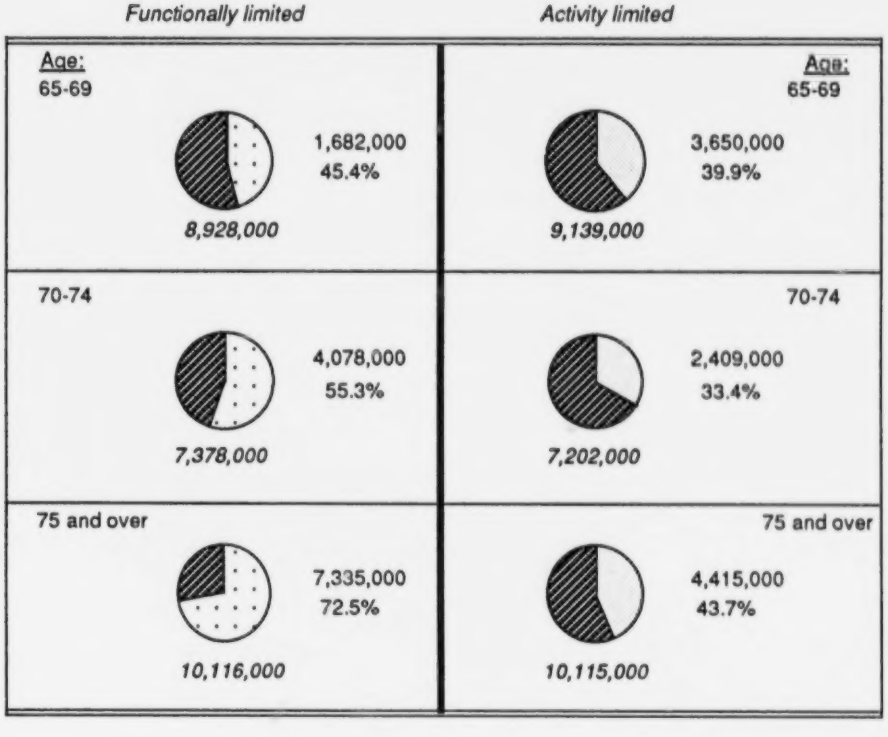
Topics covered:

How many elderly persons have limitations?
How many older persons need assistance with activities of daily living?
How many children have limitations in activity?
Are there differences in sex, race/ethnicity or income for children with limitations?
How many children and youth receive special education services?
Where do children and youth receive special education services?

How many elderly persons have limitations?

Elderly persons are particularly affected by **activity limitations**. In contrast to people under 45, among whom fewer than 10% report activity limitations, 39.6% of people age 65 and older are limited in activity. Similarly, physical **functional limitations** affect the elderly quite strongly. More than half (58.5%) of persons over 65 have functional limitations in physical activities.

Over half of elderly persons are functionally limited and about 4 of 10 are limited in activity.

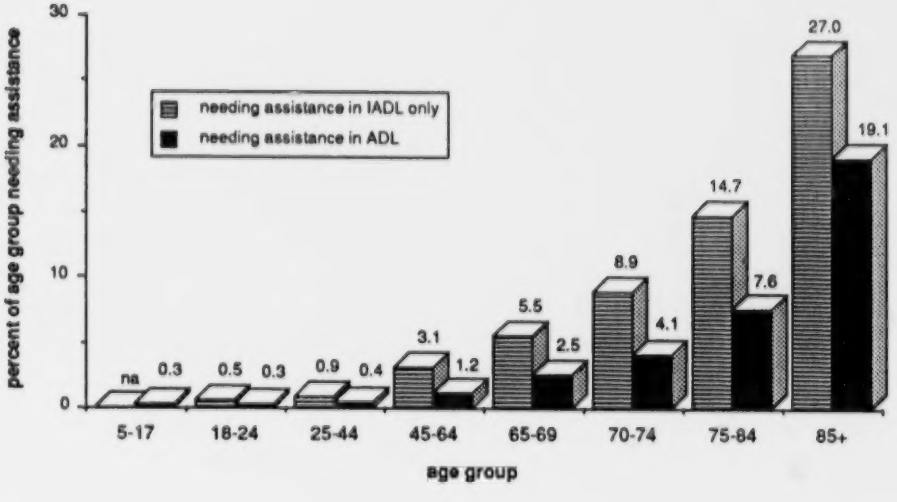


Sources: Bureau of the Census, Series P-70, #8; LaPlante, 1988
Surveys: SIPP, 1984; NHIS,1983-1985

How many older people need assistance with activities of daily living?

The percentage of people in any given age range needing help with **ADL** (activities of daily living) doesn't rise above 10% until age 85, when it jumps to 19.1%. Similarly, the percentage of those needing assistance in **IADL** (instrumental acitivities of daily living) only doesn't rise above 10% until age 75 (14.7% for 75-84; 27.0% for 85 and over). The numbers of people who need assistance, however, is not insignificant at younger age groups. Over 660,000 of 25-44 year olds need assistance in IADL only and another 250,000 in ADL. Almost 1.4 million 45-64 year olds need assistance in IADL only, and 540,000 more in ADL.

Need for assistance increases later in life.



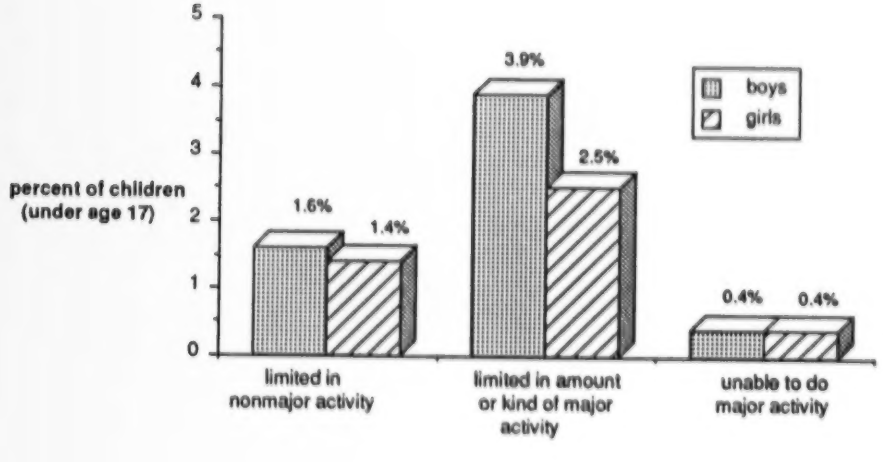
Source: LaPlante
Survey: NHIS, 1983-1985

How many children have limitations in activity?

Over 3.2 million children have **activity limitations** (5.1% of all children). An estimated 1.5% of children are limited in an activity other than playing or attending school (children's **major activity**), 3.2% are limited in kind or amount of play or school they can attend, and 0.4% are unable to play or attend school at all. Boys are more likely to be limited than girls (5.9% to 4.2%), especially in amount or kind of play or school attended (3.9% to 2.5%).

Technical Note: Major activity for children changes from playing for those under age 5 to attending school from age 5-17.

Boys tend to have slightly more minor activity limitations.

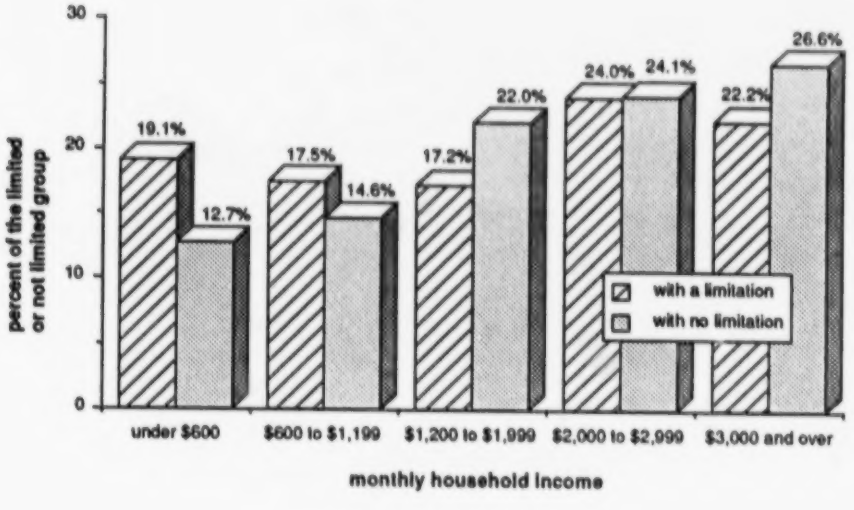


Source: LaPlante
Survey: NHIS, 1983-1985

Are there differences in sex, race/ethnicity or income for children with limitations?

Children with a disability (under 18 years) can be identified if they had either 1) a long-lasting condition that limited their ability to run, walk, or play, or 2) a long-lasting mental or emotional problem that limited their ability to learn or to do regular school work. Almost 2 million children have a physical, mental, or emotional disability by this definition (3.1% of the population under 18). Of this limited population, males are more highly represented (56.1% are males compared with 50.9% of those with no limitation), as are black children (16.6% of the limited population compared to 15.2% of the nonlimited child population). Furthermore, as shown below, children in households with low monthly incomes have higher proportions of limitations than those in higher income families.

As household income rises, the proportion of children with no limitations also rises.

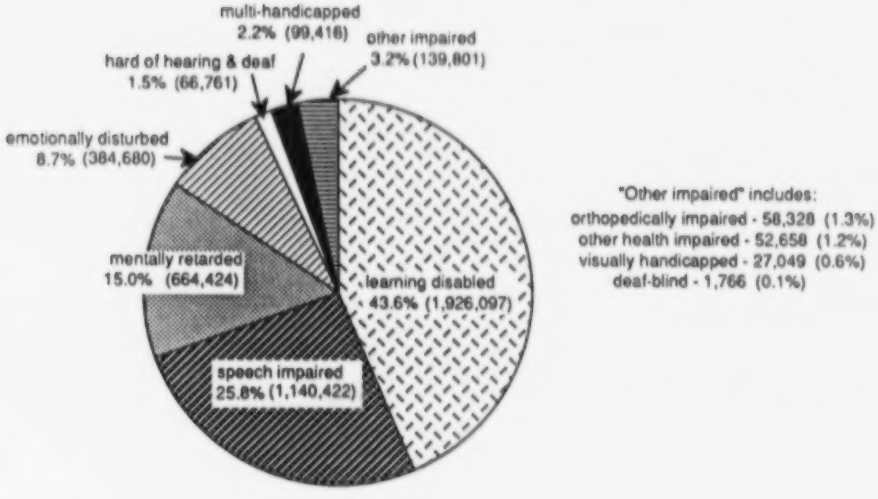


Source: Bureau of the Census, Series P-70, #8
Survey: SIPP, 1984

How many children and youth receive special education?

In the United States (including all insular areas), 4.4 million children and youth age 3 to 21 with disabling conditions are served under the Education of the Handicapped Act (**EHA-B**) and Chapter 1 of the Education Consolidation and Improvement Act - State Operated Programs (**ECIA [SOP]**). These two federal programs provide **special education** funding for disabled children and youth from birth through age 21. Of these children, 43.6% have learning disabilities, 25.8% are speech impaired, 15.0% are mentally retarded, and 8.7% are emotionally disturbed. These data are highly affected by age. For 3 to 5 year olds, 69% (the majority) are speech impaired. For 6 to 11 year olds, speech impaired (41%) and learning disabled (39%) are the two largest groups, while learning disabled is the largest for the 12 to 17 year olds (60%). The largest groups for those from 18 to 21 years old are learning disabled (44%) and mentally retarded (35%).

Nearly one-half of special education students have learning disabilities.



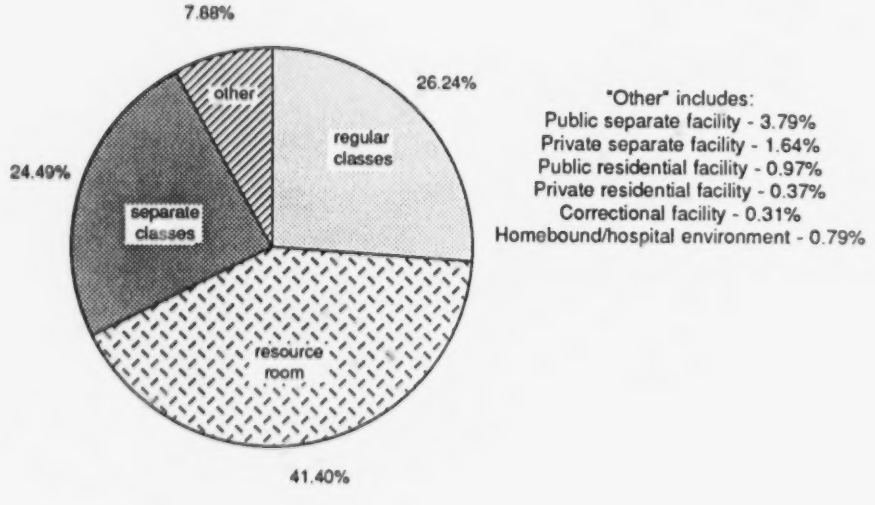
Source: Office of Special Education and Rehabilitative Services, 1988
OSEP state reported data, 1986-87 school year

Where do children and youth receive special education?

The majority of students with handicaps receive **special education** and related services in settings with nonhandicapped peers. Over 26% receive special education in regular classes, while an additional 41% are served primarily in resource rooms. Over 24% were served in separate classes in regular education buildings. Nearly 8% of the special education population were served in a separate, residential, or correctional facility, or a homebound hospital facility.

There is variation, however, across handicapping conditions. Students with learning disabilities or speech impairments are served primarily in regular classes or resource rooms (77% and 92%, respectively). Nationally, 56% of the mentally retarded students are placed in separate classes.

Four of ten special education students are served in a resource room.



Source: Office of Special Education and Rehabilitative Services, 1988
OSEP state reported data, 1986-87 school year

Section 5: Work and Disabilities

Attempting to count people who have a work disability is somewhat easier than trying to estimate the number of all people with disabilities. In work disability there is an easy-to-survey age group (the working ages-- 16-64 for one survey and 18-69 for another) and a specific activity in which to measure ability (namely, work). The Bureau of the Census produces yearly data on work disability from its annual March Income Supplement to the Current Population Survey (CPS). Most of the data in this section derive from this survey. A slightly broader definition of work and disability is provided by the NHIS in its measurement of work limitation, which is also presented in this section.

Topic Questions:

How many people are considered to be work disabled?
How many work disabled persons are in the labor force or are unemployed?
How many work disabled persons are working full time?
How do the states differ in numbers of people with work disabilities?
How many persons have a severe work disability?
How many people are limited or unable to work because of a health condition?
What chronic health conditions are the most frequent causes of work limitation?
How do occupational injuries and illnesses affect work disability?
What types of occupations are held by people with work disabilities?
What are the earnings of someone with a work disability?
Do disabled workers live alone or with their families?
How many people in institutions have a work disability?
How many people with disbilities does the Vocational Rehabilitation system help?

How many people are considered to be work disabled?

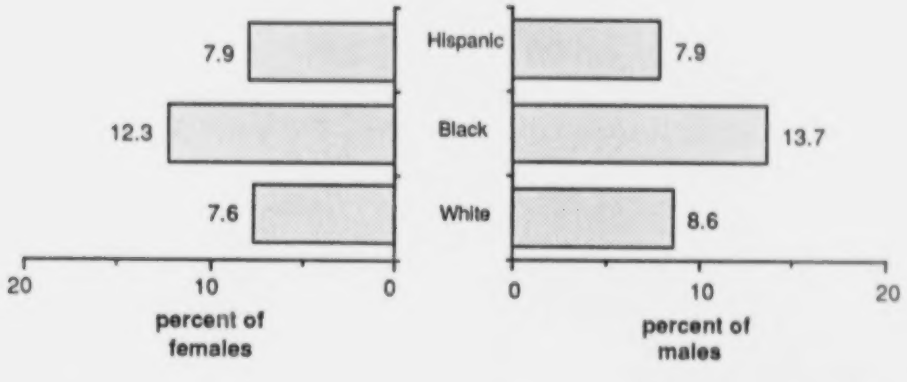
The number of noninstitutionalized people in the United States with a **work disability** is estimated to be 13.3 million, which represents 8.6% of the working age population (16 to 64 years old).

Higher percentages of blacks are work disabled than whites or Hispanics. This pattern is most apparent in numbers for men and women, where 13.7% of black men and 12.3% of black women are work disabled compared with 8.6% of white men and 7.6% of white women, and 7.9% of Hispanic men and 7.6% of Hispanic women who are work disabled.

Work disability increases in frequency with age. At 16-24 years, 3.5% are work disabled; for 25-34 years, the proportion rises to 5.4%; for 35-44 years, 7.5%; from 45-54 years, 11.0%; and for 55-64 years, 22.2% are work disabled.

Technical Note: The Hispanic category can include people of any race.

Higher percentages of blacks are work disabled.

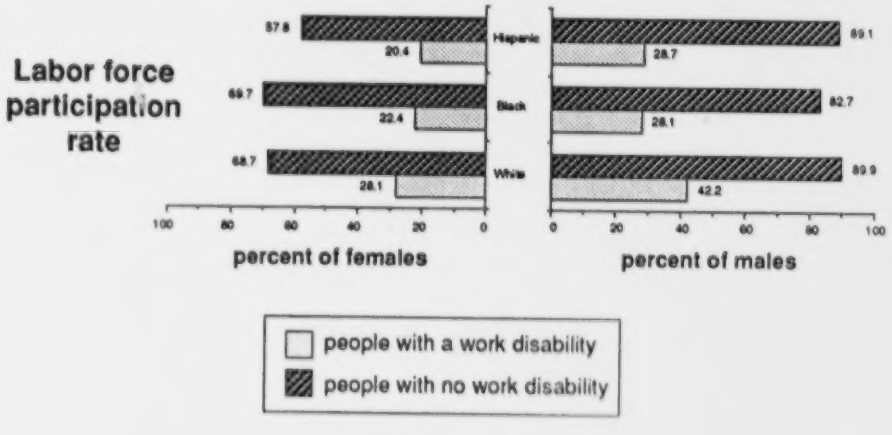


Source: Bureau of the Census, Preliminary Special Studies Report
Survey: CPS, 1987

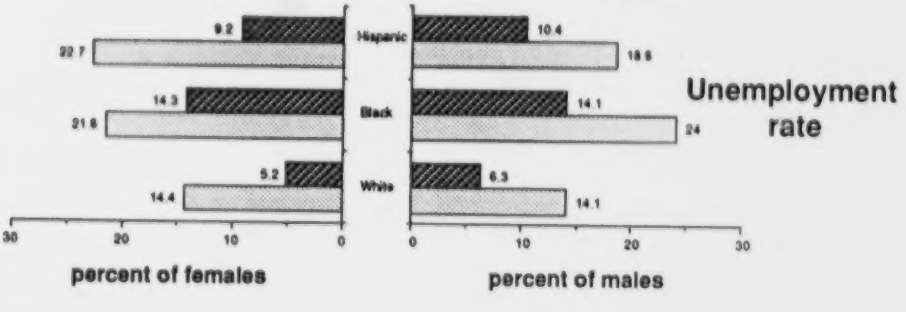
How many work disabled persons are in the labor force or are unemployed?

There are several ways to look at the employment of people with **work disabilities**. Two common ways shown below are the **labor force participation rate** and the **unemployment rate**. Of the 13.3 million people with a work disability, 33.6% are in the labor force and 15.6% are unemployed. These values are very different from those of the population with no disability (140.9 million) which has a labor force participation rate of 78.5%, and an unemployment rate of only 6.8%. The breakdowns for sex, race, and ethnicity are shown below.

Much less of the work-disabled population is in the labor force than the nonwork-disabled population.



Unemployment is much higher among work-disabled than nonwork-disabled people.

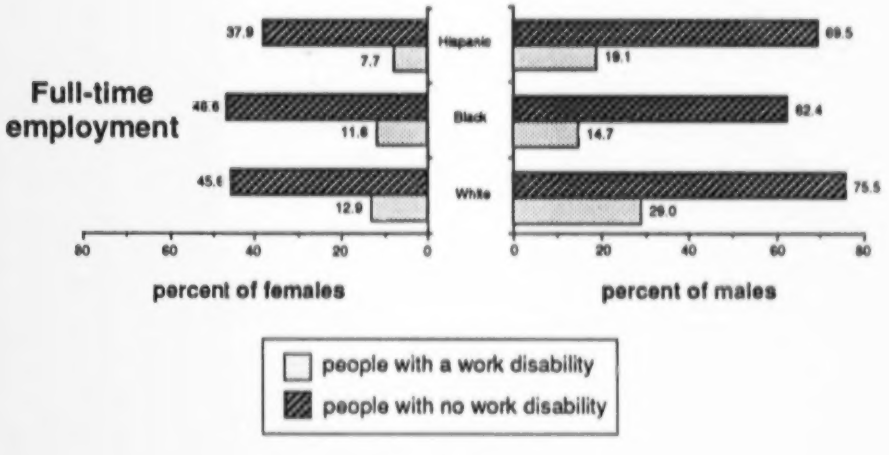


Source: Bureau of the Census, Preliminary Special Studies Report
Survey: CPS, 1987

How many work disabled persons are working full-time?

Another way to look at employment of people with a work disability is through **full-time employment** rates. Only 19.7% of the 13.3 million people with a **work disability** are employed full-time. In comparison, 59.4% of nonwork disabled people are employed full-time. The difference is true regardless of sex, race, or ethnicity. Work disabled persons are employed full-time 2.5 to 5 times less than their nonwork disabled counterparts of the same sex, race, and ethnicity.

People with a work disability are 3 to 4 times less likely to work full time, year round than those with no work disability.

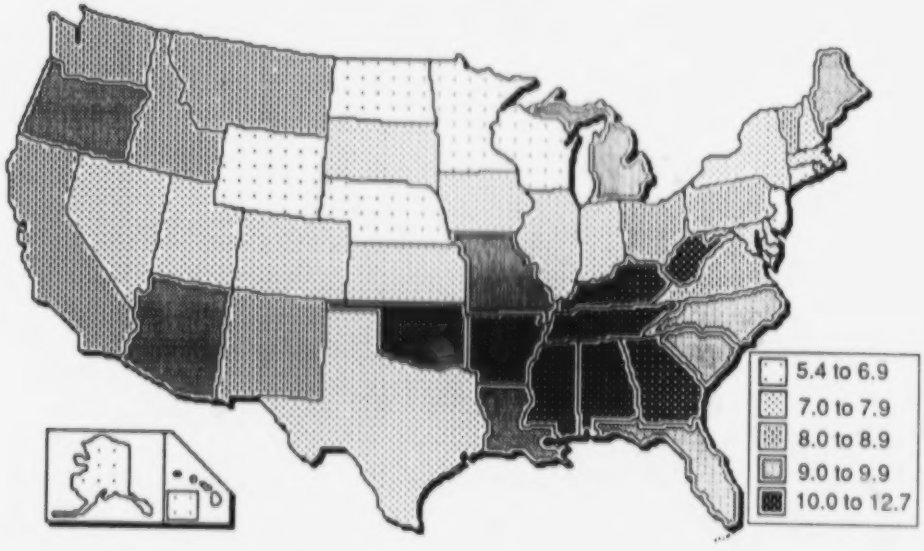


Source: Bureau of the Census, Preliminary Special Studies Report
Survey: CPS, 1987

How do the states differ in numbers of people with work disabilities?

States where the proportion of persons aged 16-64 with **work disabilities** is the highest are concentrated in the southern United States. The top 10 in percentage of disabled working age persons are: 1) Arkansas (12.7%); 2) West Virginia (12.3%); 3) Mississippi (11.8%); 4) Kentucky (11.4%); 5) Oklahoma (10.8%); 6) Alabama (10.6%); 7) Georgia and Tennessee (10.4%); and 9) Florida, Oregon, and District of Columbia (9.9%). The lowest proportions are: 51) Alaska (5.4%); 50) Hawaii (5.9%); 49) Wyoming (6.1%); 48) Connecticut (6.5%); 47) North Dakota (6.7%); 46) Wisconsin (6.8%); 45) New Jersey (6.9%); 44) Nebraska and Minnesota (7.0%); and 42) Iowa and Colorado (7.2%). Numbers of people with a work disability range from 1.3 million in California to 15,000 in Alaska.

The highest rates of work disability occur in the South.



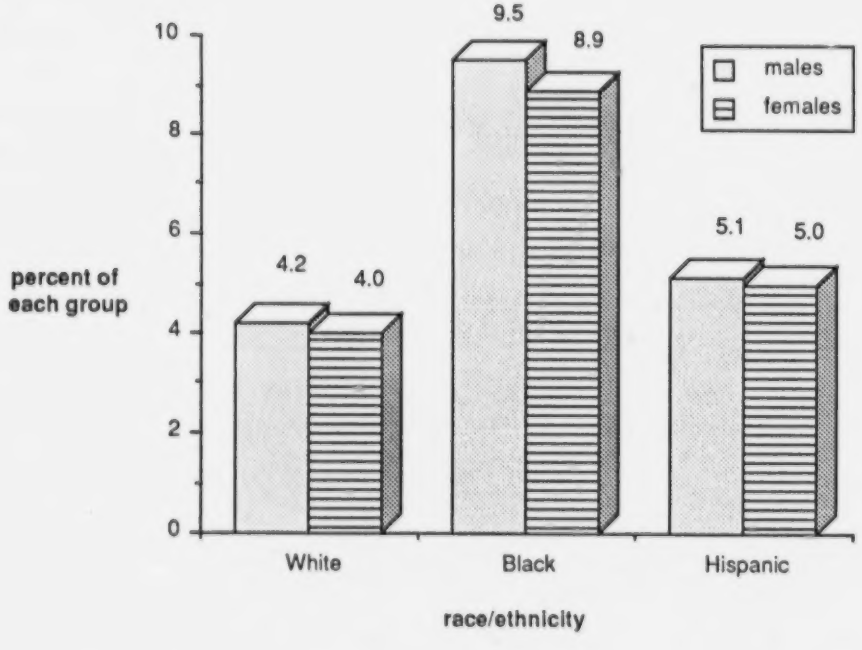
percent of 16-64 year olds with a work disability

Source: Bowe, U.S. Census and Disabled Adults Survey: 1980 Census

How many persons have a severe work disability?

There are an estimated 7.25 million people of working age (16-64) who have a **severe work disability**. Working age persons who have a severe work disability constitute 4.2% of white males (2.75 million people), 9.5% of black males (1.65 million), 5.1% of Hispanic males (599,000), 4.0% of white females (2.7 million), 8.9% of black females (868,000), and 5.0% of Hispanic females (294,000).

The proportion of working age blacks who have severe work disabilities is higher than for whites or Hispanics.



Source: Bureau of the Census, Preliminary Special Studies Report
Survey: CPS, 1987

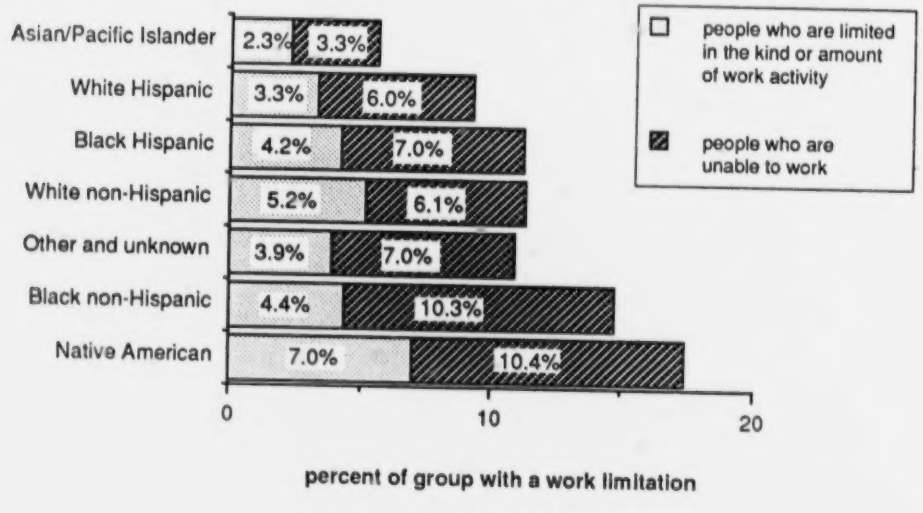
How many people are limited or unable to work because of a health condition?

For people between 18 and 69 years of age, work can be considered to be the **major activity**. Measuring **work limitations** due to a **chronic health condition**, an estimated 9.9 million of these people are unable to work (6.6%), while another 7.5 million are limited in amount or kind of work activity (4.9%). For females, 6.8% are unable to work while an additional 4.6% are limited compared to 6.3% of males unable to work and 5.3% who are limited.

As age increases, so does the impact of chronic conditions on ability to work. Only 1.8% of 18-24 year olds are unable to work, but the rate rises to 23.6% for 65-69 year olds. Similarly, 2.3% of 18-24 year olds are limited in amount or kind of work activity which rises to 9.8% for 65-69 year olds.

Technical Note: These data are from the National Health Interview Survey (NHIS), while the previous pages on work disability are from the March Supplement of the Current Population Survey (CPS). As noted earlier, the NHIS has a broader definition of work and disability (see glossary under **work limitation** and **work disability**).

Asians and Pacific Islanders report the fewest limitations in work activity.



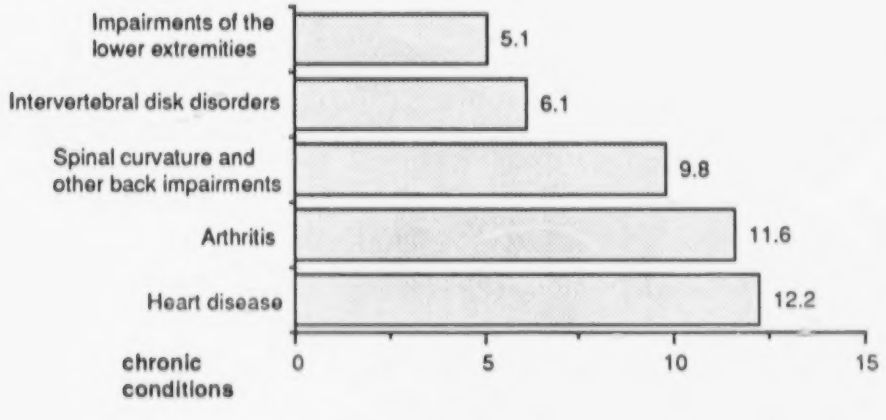
Source: LaPlante
Survey: NHIS, 1983-1985

What chronic health conditions are the most frequent causes of work limitation?

The **chronic health condition** most frequently reported to cause **work limitation** is heart disease (2.1 million conditions - 12.2% of all conditions cited as causing work limitation), followed by arthritis (2.0 million - 11.6%), spinal curvature and other back impairments (1.7 million - 9.8%), intervertebral disk disorders (1.1 million - 6.1%), and impairments of the lower extremities (883,000 - 5.1%).

Technical Note: Chronic condition groups are based on the International Classification of Diseases (ICD-9) codes as adapted by National Center for Health Statistics.

The top five chronic conditions causing work limitation.

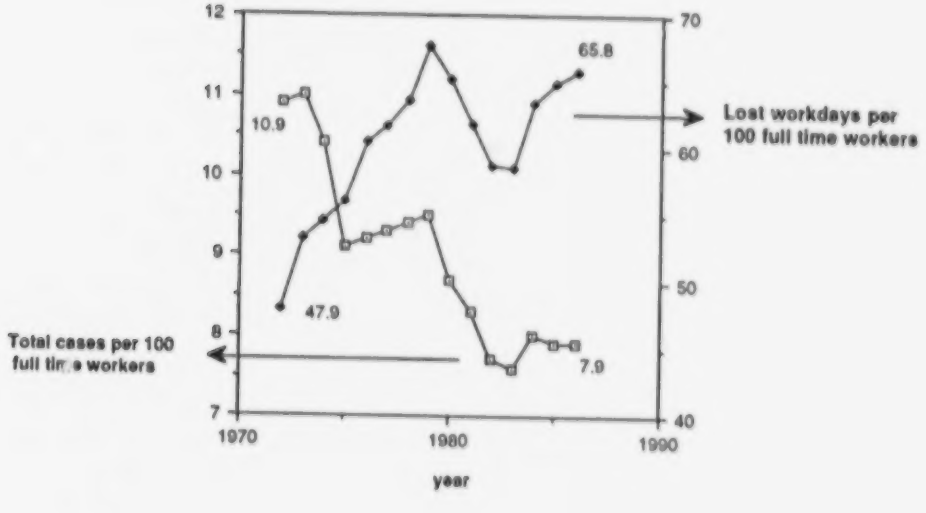


Source: LaPlante
Survey: NHIS, 1983-1985

How do occupational injuries and illnesses affect work disability?

Occupational injuries and illnesses also contribute to **work disability**. Over the past 15 years, the number of occupational injuries and illnesses has decreased, but the impact has increased. In 1972, 10.9 cases of injury or illness were recorded for every 100 full-time workers. By 1986, that incidence rate had dropped to 7.9 cases per 100 workers. In 1972, they caused 47.9 lost work days per 100 workers, whereas by 1986, the rate had increased to 65.8 lost workdays per 100 workers.

The effect of occupational illnesses and injuries has increased over the last 15 years.



Source: Bureau of Labor Statistics
Survey: ASOII, 1972-1986

What types of occupations are held by people with work disabilities?

The distribution of people with **work disabilities** in various occupations differs from the distribution of people without work disabilities. The most frequent occupational group for men with a work disability is operators/laborers (24.0%) compared to 20.6% of men without a work disability. Most men without a work disability, 25.5%, are managers/professionals while only 18.5% of work disabled men held those positions.

Women with a work disability are most frequently in technical/sales/administrative support (41.9%) and service (28.0%) positions. Women without a work disability are also mostly working as technical/sales/administrative support (45.4%), but there are many more working as managers/professionals (25.2%).

People with a work disability are less likely to be managers or professionals.

PERCENT DISTRIBUTION	with a work disability		without a work disability	
Employed	100.0 %		100.0 %	
	males	*females*	*males*	*females*
OCCUPATIONAL GROUP				
Managerial and professional specialty	18.5	16.9	25.5	25.2
Technical, sales, and administrative support	18.4	41.9	19.8	45.4
Service	12.3	28.0	9.6	17.3
Farm, forestry, and fishing	4.9	1.3	4.0	0.9
Precision, production, craft, and repair	21.6	2.2	20.1	2.2
Operators, fabricators, and laborers	24.0	9.4	20.6	8.8

Source: Bureau of the Census, Preliminary Special Studies Report
Survey: CPS, 1987

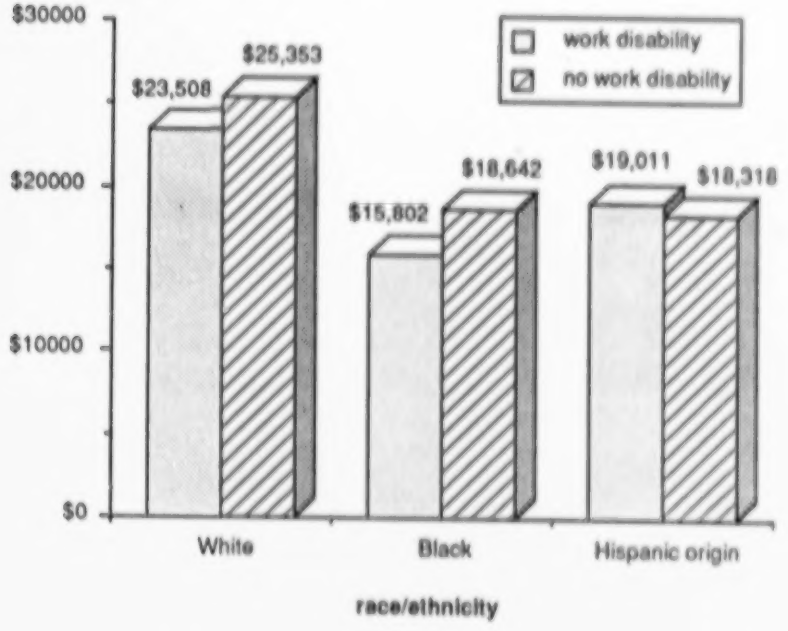
What are the earnings of someone with a work disability?

The **median annual income** of persons with a **work disability** is $6,434, while for people with no work disability it is more than twice as much ($13,403).

Earnings of disabled workers in **full-time employment** differ slightly from that of workers with no work disability. The mean earnings of white workers with a work disability are $23,508 compared to $25,353 for white workers without a work disability. For blacks, $15,802 is the mean earnings of full-time disabled workers as opposed to $18,642 for workers without a work disability. For Hispanic full-time workers, workers with a disability earn slightly more than workers without a disability ($19,011 compared to $18,318).

Technical Note: Earnings are in 1987 dollars. Persons of Hispanic origin can be of any race.

The difference between the earnings of people with and without work disabilities is slight for year round full-time workers.



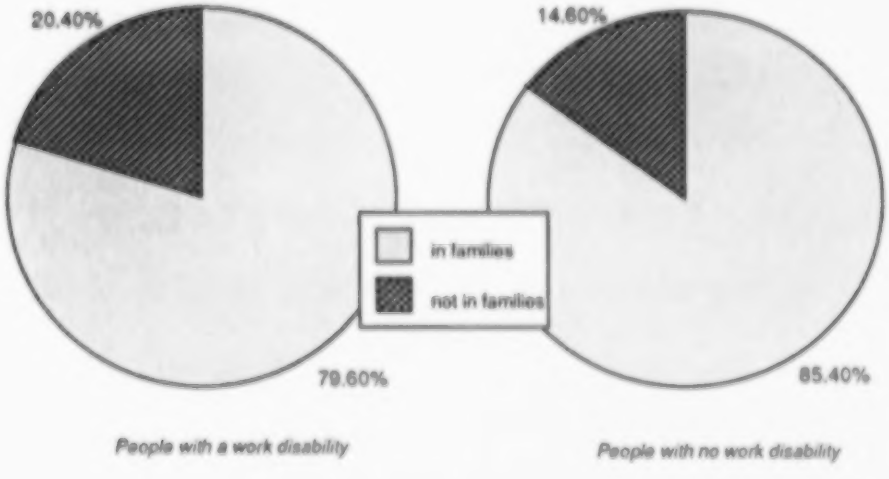
Source: Bureau of the Census, Preliminary Special Studies Report
Survey: CPS, 1987

Do disabled workers live alone or with their families?

Of the 13.3 million people with a **work disability**, 79.6% live with their families. The **mean family income** for these families is $26,144. Of the 140.9 million people with no work disabilities, 85.4% live with their families, which have a mean income of $40,480. The people with work disabilities who live with unrelated individuals have a mean income of $9,603 compared with $18,718 for those with no work disabilities.

Technical Note: Income is 1986 dollars.

People with work disabilities are less likely to live with their families than people with no work disabilities.

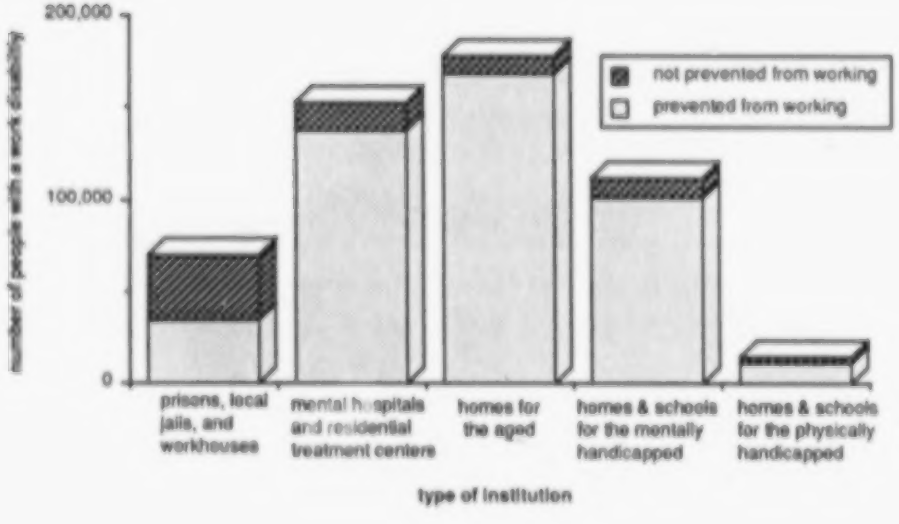


Source: Bureau of the Census, Preliminary Special Studies Report
Survey: CPS, 1987

How many people in institutions have a work disability?

Two and one-half million people are residents of institutions in the United States. Of the estimated 460,000 persons aged 16 to 64 in prisons, local jails and workhouses, 69,000 (15.1%) have a **work disability**. Of the 187,000 people in mental hospitals and residential treatment centers, 152,000 (81.8%) have a work disability. An estimated 93.8% of the 189,000 persons aged 16-64 receiving care in homes for the aged have a work disability. Likewise, high amounts of work disability are evident for persons receiving care in homes and schools for the mentally handicapped (94.5% of the 118,000 persons), and homes and schools for the physically handicapped (91.1% of the 15,000 persons).

Work disabilities for institutionalized people are usually severe enough to prevent them from working.

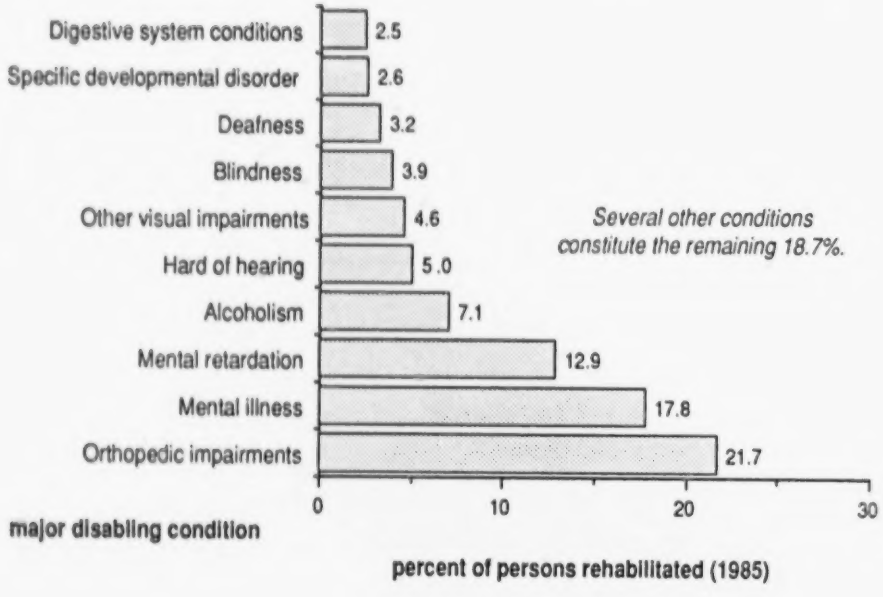

200,000
100,000
0
number of people with a work disability
not prevented from working
prevented from working
prisons, local jails, and workhouses
mental hospitals and residential treatment centers
homes for the aged
homes & schools for the mentally handicapped
homes & schools for the physically handicapped
type of institution

Source: Bureau of the Census, PC80-2-4D
Survey: U.S. Census, 1980

How many people with disabilities does the Vocational Rehabilitation system help?

The state-federal **vocational rehabilitation** (VR) program provides services for individuals with disabilities, assisting them in obtaining employment. The program, authorized by the Rehabilitation Act of 1973, as amended served 917,482 persons in FY1987, including 583,688 with severe disabilities. That year, 219,616 individuals, including 136,442 with severe disabilities, were **rehabilitated**, or successfully completed their VR services and found work in a variety of jobs. Types of conditions and impairments that people served by VR have are shown below.

Vocational rehabilitation serves people with varying types of disabilities.



Source: Rehabilitation Services Administration, 1988
Data Year: 1985, 1987

Glossary

This list provides explanation of terms used in the book that may require clarification. Each of these terms is referenced on the page(s) upon which it is used. The definitions are taken from the survey or footnoted publication as closely as possible in order to convey the original authors' perspectives.

Activity limitation: Being limited in an activity that a person would otherwise be expected to perform. The major activity is based upon the person's age group (see also Major activity). The four categories of limitation are: unable to perform the major activity; limited in the kind or amount of the major activity; limited in a non-major activity; and not limited. This definition is used in the National Health Interview Survey (NHIS).

Activity restriction: Four types of restricted activity are measured in the NHIS (1986): bed days (in bed more than half a day due to illness or injury); work-loss days (missing more than a half day from a job or business) for currently employed persons 18 years of age and over; school-loss days (missing more than half a day of school) for children 5-17 years of age; and cut-down days (where someone cuts down on more than half the things he or she usually does).

ADL: The NHIS probes for information on persons who need the help of others in performing activities of daily living (ADL). The ADLs are bathing, dressing, eating, and getting around the home (see also IADL).

Children with a disability: In the Survey of Income and Program Participation (SIPP), children (persons under age 18) were identified as disabled if they had either (a) a long-lasting condition that limited their ability to walk, run, or play, or (b) a long-lasting mental or emotional problem that limited their ability to learn or to do regular schoolwork.

Chronic health condition: A condition that a respondent described as having persisted for three or more months is considered to be chronic, as is any condition that is on a list of conditions always classified as chronic (created for the NHIS) no matter how long the person has had the condition.

ECIA (SOP): Chapter 1 (Handicapped Programs) of the Education Consolidation and Improvement Act—State Operated Programs. This chapter provides federal support for handicapped children and youth in programs operated by state agencies. It provides assistance for children and youth from birth through age 21 (see also EHA-B).

EHA-B: Part B of the Education of the Handicapped Act assures a free appropriate education to all handicapped children, which emphasizes special education and related services designed to meet their unique needs (Sec. 60[c]). This Section of the Act provides assistance to children and youth from age 3 through age 21.

Family income: Used in the NHIS, each member of a family (related by blood, marriage, or adoption) is classified according to the total income of the family. Unrelated individuals are classified according to their own incomes. Income is recorded for the 12-month period preceding the interview week. Income is from all sources.

Full-time employment: A full-time employed worker, according to the CPS, is one who worked primarily at full-time civilian jobs 50 weeks or more during the preceding calendar year.

Functional limitation: The SIPP asked respondents about their ability to perform the following specific sensory and physical activities: (1) seeing ordinary newspaper print (with glasses or contacts if normally used), (2) hearing normal conversation (using aid if normally used), (3) having speech understood, (4) lifting or carrying 10 lbs., (5) walking a quarter of a mile, (6) climbing a flight of stairs without resting, (7) getting around outside, (8) getting around inside, (9) getting into and out of bed. The inability to perform these activities is classified in the SIPP as a functional limitation.

IADL: The NHIS collected information on the respondent's need for assistance in performing instrumental activities of daily living (IADL). The IADLs include: doing household chores; doing necessary business; shopping; and getting around for other purposes. People who responded that they needed assistance in ADL were not asked about IADL (see also ADL).

Impairments: As defined in the NHIS, impairments are chronic or permanent defects, usually static in nature, that result from disease, injury, or congenital malformation. They represent decrease or loss of ability to perform various functions, particularly those of the musculoskeletal system and the sense organs.

Injury: The NHIS described an injury as a condition sustained in an accident or in nonaccidental violence. Included are fractures, dislocations, sprains, strains, wounds, lacerations, contusions, burns, and toxic effects.

Institutionalized population: The Census counts anyone who is in an institution on the day of the census as institutionalized. Institutions include correctional institutions, mental (psychiatric) hospitals, residential treatment centers, tuberculosis hospitals, chronic disease hospitals, homes for the aged, homes and schools for the mentally handicapped, homes and schools for the physically handicapped, homes for unwed mothers, homes for dependent and neglected children, training schools for juvenile delinquents, and detention homes for juveniles.

Labor force participation rate: As used by the Bureau of the Census in the March Supplement of the Current Population Survey (CPS), the labor force includes people employed as civilians, unemployed, or in the Armed Forces during the survey week (see also Unemployment rate). People who are neither employed nor seeking employment are not included in the labor force (people engaged in housework, attending school, unable to work because of long-term physical or mental illness, persons who are retired or too old to work, seasonal

workers in an off season, and voluntarily idle people).

Major activity: Activity limitations are defined in terms of a person's ability to perform a major activity (see Activity limitation). Major activities are defined differently for different age groups by the NHIS. For children age 5 and younger, the major activity is ordinary play; for the 5-17 age group, attending school; for those 18-69, working or keeping house; for people 70 and over, capacity for self-care (unassisted ability to perform ADL and IADL).

Mean annual income: The CPS measures the mean annual income by dividing the total income of individuals by the total number of individuals (For sources of income, see Mean family income).

Mean family income: The CPS measures the mean family income by dividing the total income of families by the number of families. Income includes money received by everyone in the family over age 15 for the previous year. Family income does not include amounts received by family members who did not reside with the family at the time of the survey, but it does include any family members who did reside with the family at the time of the survey. Income includes wages or salary, interest, dividends, Social Security retirement, Supplemental Security Income, public assistance or welfare, veterans payments, unemployment, worker's compensation, private or public pensions, alimony, child support, regular contributions from persons not living in the household, and other periodic income.

Mental disorders: The National Institute of Mental Health Epidemiologic Catchment Area Survey diagnosed mental disorders according to the diagnostic criteria set forth in the Diagnostic and Statistical Manual of Mental Disorders - Third Edition (DSM-III) of the American Psychiatric Association. Specific disorders included substance use, schizophrenic/schizonphreniform, affective, anxiety, somatization, and antisocial personality as well as severe cognitive impairment.

Mental hospital: The Census includes in this definition federal, state, county, city, and private mental hospitals. Also included are psychiatric wings of general hospitals and residential treatment centers.

Mental retardation facility: Institutions mainly serving mentally retarded (MR) individuals, the Inventory of Long-Term Care Places (ILTCP) categorized six types of facilities: intermediate care facility for the mentally retarded (ICF-MR); foster home; group residence; semi-independent living program; State institution; and other kind of MR place.

Mentally retarded: "...significantly subaverage general intellectual functioning existing concurrently with deficits in adaptive behavior and manifested during the developmental period, which adversely affects a child's educational performance" (Public Law 94-142 - The Education for All Handicapped Children Act).

Monthly household income: As used in the SIPP, these estimates are based on the sum of the monthly income received by each member of the household age15 years or older at the date of the interview.

MSA: The Metropolitan Statistical Area has been defined by the U.S. Office of Management and Budget with help from the Federal Committee on Metropolitan Statistical Areas generally as a county or group of counties containing at least one city having a population of 50,000 or more plus adjacent counties that are metropolitan in character and are economically and socially integrated with the central city.

Nursing home: For the ILTCP, nursing homes included certified skilled nursing facilities, certified intermediate care facilities, licensed nursing homes, and facilities providing nursing care services.

Occupational illnesses and injuries: From the *Recordkeeping Guidelines for Occupational Injuries and Illnesses*, the definition used by the Annual Survey of Occupational Illnesses and Injuries (ASOII) for occupational injury is any injury such as a cut, fracture, sprain, etc., which results from a work accident or from exposure involving a single incident in the work environment. Occupational illness is any abnormal condition, acute or chronic illness, disease, or disorder (other than occupational injury) caused by exposure to environmental factors (inhalation, absorption, ingestion, or direct contact).

Rehabilitated: The successful placement of a Vocational Rehabilitation (VR) client in employment, such as competitive, sheltered, self-employed, or homemaker. The client often receives services purchased by VR in order to achieve the vocational goal (see Vocational Rehabilitation).

Residential facilities: Facilities that serve aged and disabled as well as mentally retarded persons. Mentally retarded persons, however, are not the primary client. These facilities do not fall under the definition of nursing home as described by the ILTCP (see Nursing home).

School limitation: The NHIS describes the major activity of persons from 5-17 years old as attending school. If a parent describes an inability of the child to attend school, or a limitation in the amount or kind of school attendance due to a chronic health condition, then the child is considered to have a school limitation.

Severe functional limitation: The Survey of Income and Program Participation (SIPP) regards a person who is unable to perform one or more of the activities, or needing the help of another person in order to perform one or more of the activities, as having a severe functional limitation.

Severe work disability: The Current Population Survey (CPS) classifies persons as having a severe work disability if (1) they did not work in the survey week because of a long-term physical or mental illness that prevents the performance of any kind of work, (2) they did not work at all in the previous year because of illness or disability, (3) they are under 65 years of age and covered by Medicare, and (4) they are under 65 years of age and a recipient of Supplemental Security Income (SSI) (see also Work disability).

Special education: Free appropriate public education and related services provided for children and youth with handicaps from birth through age 21. As-

sisted through funding by federal legislation EHA-B and Chapter 1 of ECIA(SOP) (see EHA-B; ECIA(SOP)).

Unemployment rate: The number of unemployed persons divided by the number of people in the labor force. Unemployed people include those who, during the CPS week, had no employment but were available for work and (1) had engaged in a specific job seeking activity within the past 4 weeks, (2) were waiting to be called back to a job from which they had been laid off, or (3) were waiting to report to a new wage or salary job within 30 days (see Labor force participation rate).

Vocational Rehabilitation: State-run, and state and federally funded programs designed to assist individuals with disabilities in acquiring or reacquiring gainful employment.

Work disability: Persons were classified as having a work disability by the Current Population Survey (CPS) if they met any of the following criteria: (1) had a health problem or disability which prevents them from working or which limits the kind or amount of work they can do, (2) had a service connected disability or ever retired or left a job for health reasons, (3) did not work in survey week because of a long-term physical or mental illness or disability which prevents the performance of any kind of work, (4) did not work at all in 1986 because of illness or disability, (5) under 65 years of age and covered by Medicare, or (6) under 65 years of age and a recipient of SSI (Supplemental Security Income) (see also Severe work disability).

Work limitation: In the NHIS, a person can be described as having a work limitation if he or she describes a chronic health condition that prevents performance of work at all, allows only certain types of work to be performed, or prevents him or her from working regularly.

Bibliography

Non-Federal Data Sources:

Ashbaugh, J.W., Leaf, P.J., Manderscheid, R.W., and Eaton, W. "Estimates of the size and selected characteristics of the adult chronically mentally ill population living in U.S. households", **Research in Community and Mental Health**, vol. 3, pp. 3-24, JAI Press, 1983.

Goldman, H.H., and Manderscheid, R.W. "The epidemiology of psychiatric disability", in **Psychiatric Disability**, Meyerson, A. and Fine, T. (eds.), American Psychiatric Press, Inc.

Jacobson, J.W., and Janicki, M.P. "Observed prevalence of multiple developmental disabilities", **Mental Retardation**, vol. 21, no. 3, pp 87-94, American Association on Mental Deficiency, June 1983.

Lakin, K.C., Hill, B.K., White, C.C., and Wright, E.A. "Longitudinal change and interstate variability in the size of residential facilities for persons with mental retardation (Brief Report No. 28)". Minneapolis: University of Minnesota, Minnesota Affiliated Program, 1987.

National Information Center for Children and Youth with Handicaps, Fact sheets on Mental retardation, Autism, Cerebral Palsy, Epilepsy, and Learning disabilities, NICHCY, P.O. Box 1492, Washington, D.C. 20013.

Pfeiffer, David. "The number of disabled persons in the U.S. and its policy implications", Paper presented to the Society for the Study of Chronic Illness, Impairment, and Disability, at Reno, Nevada, April 23-26, 1986.

Pfeiffer, David. "Policy, percentages, and disability", Suffolk University, Boston, Massachusetts, 1987.

Rice, D.P., and LaPlante, M.P. "Chronic illness, disability, and increasing longevity", in **The economics of long-term care and disability**, Sean Sullivan and Marion Ein Lewin, (eds.), Washington, D.C.: American Enterprise Institute for Policy Research, 1988.

White, C.C., Lakin, K.C., Hill, B.K., Wright, E.A., and Bruininks, R.H. "Persons with mental retardation in state -operated residential facilities: Year ending June 30, 1986 with longitudinal trends from 1950-1986 (Report No. 24)". Minneapolis: University of Minnesota, Minnesota Affiliated Program, 1987.

Zola, Irving. "Policies and programs concerning aging and disability: Toward a unifying agenda", in **The economics of long-term care and disability**, Sean Sullivan and Marion Ein Lewin, (eds.), Washington, D.C.: American Enterprise Institute for Policy Research, 1988.

Federal Data Sources:

Bureau of the Census

Bowe, Frank. U.S. Census and disabled adults: The 50 states and the District of Columbia. Arkansas Research and Training Center in Vocational Reha-

bilitation, University of Arkansas, Arkansas Rehabilitation Services. Hot Springs: April 1984.

Bowe, Frank. **Disabled in 1985: A portrait of American adults**. Arkansas Research and Training Center in Vocational Rehabilitation, University of Arkansas, Arkansas Rehabilitation Services. Hot Springs: 1986.

Haber, L., and McNeil, J. "Methodological questions in the estimation of disability prevalence," Population Division, Bureau of the Census, 1983.

Bureau of the Census. Persons in institutions and other group quarters, **1980 Census of Population.** Washington, D.C.: U.S. Department of Commerce, Publication No. PC80-2-4D, October 1984.

Bureau of the Census. Current Population Reports, Series P-23, No. 127, **Labor force status and other characteristics of persons with a work disability: 1982**. Special Studies, Washington, D.C.: U.S. Department of Commerce, July 1983.

Bureau of the Census. Current Population Reports, Series P-23, No. 138, **Demographic and socioeconomic aspects of aging in the United States**. Washington, D.C.: U.S. Department of Commerce, August 1984.

Bureau of the Census. Current Population Reports, Series P-60, No. 155, **Consumer income: Receipt of selected non-cash benefits, 1985**. Washington, D.C.: U.S. Department of Commerce.

Bureau of the Census. Current Population Reports, Series P-70, No. 8, **Disability, functional limitation, and health insurance coverage: 1984/85**. Washington, D.C.: U.S. Department of Commerce, December 1986.

Bureau of the Census. Unpublished tables from March 1987 Current Population Survey. Tables report median income by age, sex, and reason for not working, which includes not working in last year and working part time due to disability.

Department of Education

LaPlante, Mitchell P. **Data on disability from the National Health Interview Survey, 1983-85.** An InfoUse Report. Washington, D.C.: National Institute on Disability and Rehabilitation Research, 1988.

Child Trends, Inc. **The school-age handicapped: A statistical profile of special education students in elementary and secondary schools in the United States.** National Center for Education Statistics. Washington, D.C.: January 1985.

Human Services Research Institute. **Summary of data on handicapped children and youth**. National Institute of Handicapped Research. Washington, D.C.: December 1985.

Office of Special Education and Rehabilitative Services. To assure the free appropriate public education of all handicapped children. **Ninth Annual Report to Congress on the Implementation of the Education of the Handicapped Act**. Washington, D.C.: U.S. Department of Education, 1987.

U.S. Office of Special Education and Rehabilitative Services, **Tenth annual report to Congress on the Implementation of The Education to the Handicapped Act**, Washington, D.C.: U.S. Government Printing Office, 212-996/80426, 1988.

Rehabilitation Services Administration, Information Memorandum RSA-IM-88-22, "Transmittal of report: 'Caseload Statistics, State Vocational Rehabilitation Agencies, Fiscal Year 1987'", March 8, 1988, Washington, D.C.

Rehabilitation Services Administration, Information Memorandum RSA-IM-88-23, "Transmittal of report: 'Characteristics of persons rehabilitated and reasons for case closure in fiscal year 1985'", March 9, 1988, Washington, D.C.

Rehabilitation Services Administration, Information Memorandum RSA-IM-88-24, "Report comparing services to and outcomes for severely and non-severely disabled persons rehabilitated in fiscal year 1985", March 9, 1988, Washington, D.C.

Rehabilitation Services Administration, Information Memorandum RSA-IM-88-26, "Transmittal of report: 'Reasons for closure: Applicants and extended evaluation (EE) cases not accepted for Vocational Rehabilitation (VR) services, fiscal years 1981 to 1985'", March 31, 1988, Washington, D.C.

Department of Labor

Bureau of Labor Statistics, **Occupational Injuries and Illnesses in the United States, by Industry, 1986** (unpublished), 1988.

Bureau of Labor Statistics, **Occupational Injuries and Illnesses in the United States, by Industry, 1985**, U.S. Department of Labor, Bulletin 2278, Washington D.C.: U.S. Government Printing Office, 1987 - 181-519/64256, May 1987.

Health Care Financing Administration

Health Care Financing Administration. **1987 HCFA Statistics**. Bureau of Data Management and Strategy. HCFA PUB. No. 03252. Baltimore, MD: September 1987.

National Center for Health Statistics

National Center for Health Statistics. Office-based ambulatory care for patients 75 years old and over: National Ambulatory Medical Care Survey, 1980 and 1981. **Advance Data from Vital and Health Statistics**. No. 110. Public Health Service, Hyattsville, MD.

National Center for Health Statistics. Aging in the eighties, preliminary data from the supplement on aging to the National Health Interview Survey, United States, January-June 1984. **Advance Data from Vital and Health Statistics**. No. 115. Public Health Service, Hyattsville, MD.

National Center for Health Statistics. Aging in the eighties, age 65 and over: Use of community services, preliminary data from the supplement on aging to the National Health Interview Survey, United States, January-June 1984. **Advance Data from Vital and Health Statistics**. No. 124. Public Health Service, Hyattsville, MD September 30, 1986.

National Center for Health Statistics. Aging in the eighties, age 65 and over: Impaired senses for sound and light in persons age 65 years and over, preliminary data from the supplement on aging to the National Health Interview Survey, United States, January-June 1984. **Advance Data from Vital and Health Statistics**. No. 125. Public Health Service, Hyattsville, MD, September 19, 1986.

National Center for Health Statistics. 1985 Summary: National Ambulatory Medical Care Survey. **Advance Data from Vital and Health Statistics**. No. 128. Public Health Service, Hyattsville, MD.

National Center for Health Statistics. Use of nursing homes by the elderly, preliminary data from the 1985 National Nursing Home Survey. **Advance Data from Vital and Health Statistics**. No. 135. Public Health Service, Hyattsville, MD, May 14, 1987.

National Center for Health Statistics. Discharges from nursing homes, preliminary data from the 1985 National Nursing Home Survey. **Advance Data from Vital and Health Statistics**. No. 142. Public Health Service, Hyattsville, MD, September 30, 1987.

National Center for Health Statistics. The 1986 Inventory of Long-Term Care Places. **Advance Data from Vital and Health Statistics**. No. 143. Public Health Service, Hyattsville, MD, September 30, 1987.

National Center for Health Statistics. Nursing and related care homes as reported from the 1986 Inventory of Long-Term Care Places. **Advance Data from Vital and Health Statistics**. No. 147. Public Health Service, Hyattsville, MD , January 22, 1988.

National Center for Health Statistics. Use of special aids: United States, 1977. **Vital & Health Statistics: Series 10, No. 135.** DHHS Pub. No. (PHS) 81-1563. Public Health Service, Hyattsville, MD. October 1980.

National Center for Health Statistics. Americans needing home care, United States. **Vital & Health Statistics: Series 10, No. 153.** DHHS Pub. No. (PHS) 86-1581. Public Health Service, Hyattsville, MD.

National Center for Health Statistics. Prevalence of selected chronic conditions, United States, 1979-81. **Vital & Health Statistics: Series 10, No. 155.** DHHS Pub. No. (PHS) 86-1583. Public Health Service, Hyattsville, MD, July 1986.

National Center for Health Statistics. Disability days, United States, 1983. **Vital & Health Statistics: Series 10, No. 158.** DHHS Pub. No. (PHS) 87-1586. Public Health Service, Hyattsville, MD, November 1986.

National Center for Health Statistics. Types of injuries and impairments due to injuries, United States. **Vital & Health Statistics: Series 10, No. 159.** DHHS Pub. No. (PHS) 87-1587. Public Health Service, Hyattsville, MD, November 1986.

National Center for Health Statistics, Current estimates from the National Health Interview Survey, United States, 1986. **Vital & Health Statistics: Series 10, No. 164.** DHHS Pub. No. (PHS) 87-1592. Public Health Service, Hyattsville, MD.

National Institutes of Health

Research Triangle Institute. **Report on the National Head and Spinal Cord Injury Survey**. Bethesda, MD: National Institute of Neurological and Communicative Disorders and Stroke. November 1980.

National Institute for Mental Health

Reiger, D.A., Boyd, J.H., Burke, J.D. Jr., Rae, D.S., Myers, J.K., Kramer, M., Robins, L.N., George, L.K., Karno, M., Locke, B.Z. One month prevalence of mental disorders in the United States. **Archives of General Psychiatry**, vol. 45, Nov. 1988, p. 977-986.

National Institute of Mental Health. **Mental Health, United States 1987**. Manderscheid, R.W., and Barrett, S. A., (eds.). DHHS Pub No. (ADM) 87-1518. Washington, D.C.: Superintendent of Documents., U.S. Government Printing Office, 1987.

National Institute of Mental Health. **Mental Health, United States 1985**. Taube, C. A., and Barrett, S. A. (eds.). DHHS Pub. No. (ADM) 86-1378. Washington, D.C.: Superintendent of Documents., U.S. Government Printing Office, 1986.

Office of Technology Assessment

Office of Technology Assessment, **Technology and Handicapped People**, Congress of the United States. Washington, D.C: Office of Technology Assessment, 1982.

Social Security Administration

Social Security Administration. **Security Bulletin Annual Statistical Supplement, 1987.** Baltimore, MD: U.S. Department of Health and Human Services, December 1987.

Social Security Administration. **Characteristics of Social Security Disability Insurance Beneficiaries**. Office of Disability. SSA Pub. No. 13-11947. Washington, D.C.: May 1987.

Social Security Administration. **Program and Demographic Characteristics of SSI Beneficiaries**. Office of Disability. SSA Pub. No. 13-11977. Washington, D.C.: U.S. Department of Health and Human Services, 1987.

Appendix

In this appendix, information on the sources and limitations of the data is presented. The major surveys are the National Health Interview Survey (NHIS), the Survey of Income and Program Participation (SIPP), the Current Population Survey (CPS), the Inventory of Long Term Care Places (ILTCP), the Annual Survey of Occupational Injuries and Illnesses (ASOII), and the Census. These surveys provide the most current national numbers and estimates from respondent-based information. Estimates from surveys are within the past 10 years.

The following summaries will cover the surveys, their sampling formats, the respondent size, and definitions of terms used in the surveys concerning disability and how it is measured.

NHIS - The National Health Interview Survey is a nationwide sample of households done by the National Center for Health Statistics (NCHS). It queries the civilian, noninstitutionalized population of the United States on its health. For disability purposes, it is concerned with activity limitations and chronic conditions.

Sampling - A multistage probability design permitting a continuous sampling of the population. Each weekly sample is representative of the target population and is additive with other weekly samples. Sampling is done throughout the year thus preventing seasonal bias. The samples are grouped in four major geographic regions: Northeast, Midwest, South, and West. 1985 and 1986 use a redesign of the sampling which reduces sampling units by half and oversamples the black population.

Respondents - The following samples were reached: 1983- 105,620; 1984- 105,290; 1985- 91,531, 1986- 62,052. Budgetary considerations affected the sample size in the final part of 1985 and 1986. Response rate averaged 96% for 1983-1985, and was approximately 96.5% in 1986.

Definitions - ***Chronic condition*** is one noticed for three months or more, or being on the NCHS list of chronic conditions. ***Impairment*** is defined as a chronic or permanent defect that results from disease, injury, or congenital malformation. ***Disability*** refers to any long or short-term reduction of a person's activity as a result of an acute or chronic condition. ***Limitation of activity*** is a long-term reduction in a person's capacity to perform the average kind or amount of activities associated with his or her age group. ***Restriction of activity*** is described as behavior usually associated with a reduction in activity due to either short-term or long-term conditions (work loss days, bed days, school loss days, and cut-down days).

SIPP - The Survey of Income and Program Participation is a longitudinal survey conducted by the Bureau of the Census. It is actually the third wave to the 1984 panel of the SIPP. Core areas are covered at every survey period, while specific areas of interest are done during one runthrough. This wave is concerned with health and disability. As with the NHIS, the SIPP covers the noninstitutionalized population of residents living in the U.S.

Sampling - The same households are interviewed every four months for 2-1/2 years. A cycle of four interviews covering the entire sample, using the same questionnaire, is called a wave.

Respondents - The May/August third wave sample size was 19,100 households. While no numbers are given on number of individuals interviewed (because it is a household survey) , a rough estimate would be 49,000 (using an estimated 2.5 persons per household). The reponse rate ranged from 90% in May to 86% in August.

Definitions - ***Functional limitations*** are defined from the questions asked about the difficulty in performing basic functions (seeing, hearing, speech, walking, carrying or lifting 10 lb., getting around in or out of the house, and getting into or out of bed). ***Disability*** for adults is referred to only in terms of limitation or the inability to perform work. For children, disability is related to a long lasting condition that limits their ability to walk, run, play, learn, or attend school.

CPS - This is the March Income Supplement to the Current Population Survey. It is a monthly survey done by the Bureau of the Census which deals mainly with labor force data for the civilian noninstitutional population. Questions relating to labor force participation are asked of all members who are 14 or older in a household. In March, supplementary questions are asked about income thereby supplying the data for characteristics of noninstitutionalized persons with a work disability.

Sampling - The CPS sample was selected from the 1970 Census files covering all 50 states and the District of Columbia. The sample is continuously updated to reflect new construction.

Respondents - 60,500 households were eligible, but 2,500 were nonresponses (95.8% response rate). This translates into an approximate 120,000 persons (assuming 2.5 people per household and lowering the estimate because the sample only includes ages 14 and above).

Definitions - ***Work disability*** is the only disability measured by the CPS. People are classified as having a work disability if they

(1) have a health problem or disability which prevents them from working or limits the kind or amount of work they can do

(2) have a service connected disability or ever retired or left a job for health reasons

(3) did not work in the survey week because of long-term physical or mental illness or disability that prevents the performance of any kind of work

(4) did not work at all in previous year because of illness or disability

(5) are under 65 years of age and are covered by Medicare

(6) are under 65 years of age and a recipient of SSI (Supplemental Security Income).

ILTCP - The Inventory of Long Term Care Places is a survey of two types of facilities: nursing homes (i.e., nursing care homes, homes for the aged, personal care homes, and board and care homes) and facilities for the mentally retarded. This survey is done by the Bureau of the Census as employed by the National Center for Health Statistics (NCHS), the National Center for Health Services Research, and the Health Care Financing Administration (HCFA). This survey queries included number of beds, number of residents (including age and ethnicity), and type of ownership (government, nonprofit, profit).

Sampling - The file was created from the National Master Facility Inventory of 1982-1984 and the 1982 mental retardation facility study by the University of Minnesota's Center for Residential and Community Services. This provided 26,000 nursing and related care homes and 15,000 mental retardation facilities which were then added to through a mailing to state and national agencies asking for all known listings of facilities.

Respondents - Approximately 1,400 respondents were declared eligible for telephone and personal follow up from the original 3,300 original questionnaire returns. The field follow up was completed with a response rate of 96%.

ASOII - The Annual Survey of Occupational Injuries and Illnesses collects data on work-related injuries, illnesses, and fatalities for the Bureau of Labor Statistics from a random sample of private establishments.

Sampling - An independent sample is selected for each state. The sample design is based on the total recorded case incidence rate. The sample is stratified on the Standard Industrial Classification (SIC) code and employment.

Respondents - The survey covered 280,000 private establishments and represents about 83 million workers in the private sector.

Census of Persons on Institutions and Group Quarters- This part of the Census enumerated the number of people with work disabilities in institutions. The Census covers the the different types of institutions and asks several demographic questions including age, sex, race/ethnicity, education level, income, occupation, and, most important for this publication, work disability.

Sampling - The basic sampling unit is the person living in a group quarter. Two sampling rates were used: (1) in counties, incorporated places, and minor civil divisions estimated at less than 2,500 people, one-half of all persons in group quarters were included; (2) in all other areas, one-sixth of the units were sampled. The lists of sites were created from commercial mailing lists or canvassing neighborhoods prior to interview.

Respondents - Together these rates accounted for 19% of the nation's units.

Definitions - ***Work disability*** is defined here as involving a condition (physical or mental) lasting 6 or more months which limited the amount of work a person could do at a job.

ECA - The National Institute of Mental Health (NIMH) Epidemiologic Catchment Area (ECA) Survey is a multisite epidemiological and health services research study that assesses mental disorder prevalence, incidence, and service use rates. The five sites for the survey and the participating universities which carried it out were New Haven, Connecticut (Yale); Baltimore, Maryland (Johns Hopkins); St. Louis, Missouri (Washington University, St. Louis), Durham, North Carolina (Duke), and Los Angeles (UCLA).

Sampling - Population sizes in the five sites ranged from 270,000 to 420,000 with mixes of urban , rural, and suburban locations as well as ethnic and age cmpositions. One adult aged18 or over was surveyed in each of a probability sample of households in an area. Oversamples were done for elderly in New Haven and Durham and blacks in St. Louis; high percentages of blacks were sampled in Durham and Baltimore; and in Los Angeles, one area was predominantly Hispanics.

Respondents - A total of 18,571 persons were interviewed, ranging from 3,004 to 5,034 completed interviews at each site.

Definitions - The National Institute of Mental Health Epidemiologic Catchment Area Survey diagnosed ***mental disorders*** according to the diagnostic criteria set forth in the Diagnostic and Statistical Manual of Mental Disorders-Third Edition (DSM-III) of the American Psychiatric Association.

61

★U.S.GOVERNMENT PRINTING OFFICE:1989-249-969/00547